APPENDIX V: SENSITIVE AREAS

TAB A - ENVIRONMENTALLY SENSITIVE AREA

The purpose of this section is to assist those who first respond to an oil spill in protecting the most sensitive and valuable biological communities. It is assumed that those first responders are unfamiliar with the relative sensitivities of the biological communities at risk from the spilled oil. This section is intended to serve as a guide only until the Unified Command System is staffed with appropriate biological expertise to make the response recommendations to the Federal On-Scene Coordinator and the State's On-Scene Commander. This section is meant to be used as a reference by the staff of the Unified Command and not as a controlling document.

1. References

Nautical charts prepared by the National Oceanic and Atmospheric Administration provide a larger scale helpful in planning for a response to a catastrophic spill involving large areas of the coastline or San Diego Bay and as navigational aids for responders.

A study of California's coastal inlets, "Coastal Inlet Protection Strategies for Oil Spill Response", was prepared for the Marine Spill Response Corporation (MSRC) and the California Department of Fish and Game's Office of Oil Spill Prevention and Response (OSPR). It contains detailed maps of the inlets and possible response strategies which are incorporated into the Area Contingency Plan by reference. Copies are available from Resource Planning, Inc. of Columbia, South Carolina or copies may be made from OSPR originals.

Maps of the sensitivity of the shoreline to oiling, the Environmental Sensitivity Index (ESI), are useful in response activities and are incorporated into the Area Contingency Plan by reference. Table (E.V.A.1) shows a listing of the shoreline types and gives a brief description of each. ESI maps are currently available for San Francisco Bay and the southern California coastline from Point Conception to the Mexican border and the Channel Islands. These maps are available through Research Planning, Inc., or photocopies of the maps may be made from OSPR originals. ESI maps of the outer coast north of Point Conception to the California/Oregon border will be available in September 1993. These maps will be in a geographic information system (GIS) and also have natural resource and some socioeconomic data available. These are also available for a fee from Research Planning, Inc., or available for copying at OSPR.

2. Environmental Sensitivity

While the basic philosophy is to protect the largest number of organisms and those most sensitive and vulnerable to oiling, it must be noted that all biological communities and organisms are sensitive to the effects of oiling. The different categories simply identify the relative degree of sensitivity. It should not be assumed that no sensitivity exists on a shoreline without specific site

identification. Even shorelines on which specific environmentally sensitive sites have not been identified have resources sensitive to oiling.

The environmental sensitivity of an site is determined by considering the following criteria:

- 1. Does the site provide habitat for species either listed or candidates for listing as rare, threatened, or endangered under state and/or Federal law?
- 2. Does the site provide habitat that is of extraordinary biological productivity?
- 3. Does the site provide habitat that is of extraordinary biological diversity?
- 4. Does the site provide habitat for organisms that are extremely vulnerable and sensitive to oiling?

Prioritization: Using these criteria, the following relative priorities for environmentally sensitive areas are established:

Category A -- First Priority for Protection:

- 1. Wetlands, estuaries, and lagoons with emergent vegetation [includes all Environmental sensitivity index (ESI) 10 shorelines (RPI,19___)]
- 2. Sheltered tidal flats (includes all ESI 9 shorelines)
- 3. Habitats of species that are listed or candidates for listing as rare, threatened, or endangered under State and Federal laws.
- 4. Sites of significant concentrations of vulnerable and sensitive species, e.g. pinniped pupping and nursery areas during the pupping season.

Category B -- Second Priority for Protection:

- 1. Major pinniped haulout areas during non-pupping seasons.
- 2. Moderate concentrations of vulnerable and sensitive species.
- 3. Other low energy shorelines not otherwise included by one of the criteria above, including rip-rap in sheltered areas (ESI 6B), exposed tidal flats (ESI 7), sheltered rocky shores (ESI 8A) and sheltered man-made structures (ESI 8B).

Category C -- Third Priority for Protection:

1. Higher energy shorelines that are not otherwise included by one of the criteria above including gravel beaches (ESI 6A), mixed sand and gravel beaches (ESI 5), coarse-grained sand to granule beaches (ESI 4), fine to medium-grained sand beaches (ESI 3), exposed wave-cut platforms (ESI 2), exposed seawalls and piers (ESI 1B) and exposed rocky cliffs (ESI 1A).

3. Mapping

Mapping is complicated by the mobile nature of many of the species considered during an oil spill response. This circumstance highlights the need to immediately involve experts with current knowledge of resources and their distribution, and the need to regard the Area Contingency Plan only as a guide for first responders without this information.

Rescuers and sites for priority in protection are mapped on the series of maps included. Circles are placed on the maps to identify the sites of concern, their relative priority for protection and the seasonality of that concern, if any. A letter on the circle indicates the area's priority for protection, with "A" indicating the first priority for protection and "B" the second priority for protection, as discussed above. If the site's priority for protection varies seasonally, the circle will be subdivided, and each subdivision will contain a letter indicating the appropriate protection priority for that season. The months of the year are represented on the face of the circle, with the month of January occurring between the 12 o'clock and 1 o'clock positions and July occurring between the 6 o'clock and 7 o'clock positions.

In some cases, such as coastal inlets, the response priority may change independent of seasons. For example, if a coastal inlet is open to tidal exchange the protection priority will be "A". If, however, the same inlet is closed to tidal exchange due to sand blockage, the protection priority is reduced to "C". Consequently, all inlets threatened by oil must be inspected early to determine the appropriate protection priority in order to activate the appropriate response.

A four digit number near the circle cross references to an adjoining site summary sheet where information regarding the resources at the location highlighted can be found. Each map is followed by one site summary sheet for each site identified on the preceding map. The site summary sheets provide specific information about the natural resource that causes the site to be of concern.

4. Relative Risk at the Time of a Spill

For the purpose of this task, "risk" is defined as "the likelihood of spilled oil reaching the vicinity of resources". During an actual oil spill event, the relative likelihood of a resource coming into contact with the oil is a result of the proximity of the spill to the natural resource and the wind, weather, current and tides at the time of the spill.

Consequently, responders to an oil spill should not assume that resources equidistant from the source of a spill are equally likely to have the oil reach them. At a minimum, first responders to a spill in the marine environment must be able to forecast the speed and direction of the spilled oil. This requires responders to have immediate access to real time information about the winds, weather, tides and currents to make the best prediction possible about the movement of the oil away from the scene of a spill.

Access to computer software programs that predict the movement of the oil in response to the conditions extant at the time of the spill are the preferred method of determining which resources are most likely to be reached by the oil and therefore at most "risk". Responders should use computer predictions for periodic intervals over the short term future as soon as possible in the response. For example, predictions would be useful for every four to eight hour increment for the first 36 to 48 hours, with the exact time and interval keyed to the maximum and minimum tides and any significant changes predicted in the wind direction and/or speed and weather. Normally, computer projections are most available to responders at the time of a spill through the National Oceanic and Atmospheric Administration's Support Coordinator.

5. Deployment of Response Resources

The deployment of response resources must be consistent with the U.S. Coast Guard's Area Contingency Plan and the facility's or vessel's oil spill contingency plan prepared for the OSPR. In the event of a spill without a responsible party, this deployment must be consistent with the State's oil spill contingency plan, unless unique local circumstances for the spill at hand dictate a variance that would more effectively protect the natural resources at risk. First responders must use the information and procedures contained in the appropriate plans and implement the plans as fully as possible consistent with good judgment and conditions extant at the time of the response.

These plans all utilize the Unified Command System. The appropriate participants in the development of recommendations for the deployment of response resources for the protection of sensitive habitats and/or species are the State and Federal trustees for fish and wildlife resources. Their recommendations should be made with current information available from local resource experts. The information in this section of the Area Contingency Plan should be used as a reference, but should be tempered with the knowledge of local conditions at the time of the spill and appropriate site specific knowledge, as available.

The decision makers in the Unified Command System are the Federal On-Scene Coordinator, the State On-Scene Commander, a local government representative and a responsible party, or their designees.

6. Prioritization of Environmental and Economic Resources

Consistent with State and Federal law, the highest priority in oil spill response in the protection of human health and safety. Protection of environmental resources is the second highest priority. Protection of economic resources is the third highest priority.

There may be situations where both the economic and environmental significance of a site or area would be considered in deciding appropriate response strategies. This consideration would only be necessary if response resources were limited. These considerations must be made at the time of the spill by the Unified Command based on the information available and conditions at the time of the spill.

7. South San Diego Bay

Generally, south San Diego Bay is considered, in total, a highly sensitive resource area. The physical dimensions of the area and the practical aspects of hardware deployment cause the complete isolation of the south bay from the movement of oil on water into the area. Consequently, only isolated areas are practical to protect. Those areas have been described in this section of the Response Plan. Response strategies have been (or will be) developed to direct the deployment of protective booms to minimize the concentration of those specific areas.

ESI CLASSIFICATIONS USED FOR SHORELINES IN THE STATE OF CALIFORNIA

ESI Classification	<u>Description</u>
1A	Exposed Rocky Cliffs
1B	Exposed Sea Walls and Piers
2	Exposed Wave-Cut Platforms
3	Fine/Medium-Grained Sandy Beaches
4	Coarse-Grained Sand/Gravel Beaches
5	Mixed Sand and Gravel Beaches
6A	Gravel Beaches
6B	Rip Rap
7	Exposed Tidal Flats
8A	Sheltered Rocky Shores
8B	Sheltered Man-Made Structures
9	Sheltered Tidal Flats
10	Marshes

AREA CONTINGENCY PLAN SITE VERIFICATION SURVEY

A. PRE-DEPLOYMENT INFORMATION (to be completed prior to drill)

I. GENERAL INFORMATION ACP Site Name:
II. PLANNED STRATEGY Purpose (i.e. protection, recovery, etc.): Date/time strategy to be implemented: Describe anticipated booming strategy (i.e. deflection, corralling, method of deployment, location of anchor points, etc.). Please be specific and attach a diagram/sketch of this strategy.
II. VARIATION FROM ACP RECOMMENDED STRATEGY If the strategy is different from that described in the ACP, attach ACP strategy and explain any differences and the reason(s) for these differences in the space below.

TABLE E-V-A-2-1

B. DEPLOYMENT INFORMATION (to be completed during drill)

I. ON-SCENE CONDITIONS Date/time: Weather (including air temp.): Winds (direction, magnitude): Sea-state: Tide: Current:
II. ADJUSTMENTS TO PLANNED STRATEGY Describe any adjustment(s) made to the strategy as planned:
Reason(s) for adjustment(s):
III. ACTUAL EQUIPMENT DEPLOYED Type of boom:
Length of boom:
Type of boom anchors:
Number of small boats/skiffs used: Type of small boats/skiffs used:
i ype of shiah doats/skins used.

TABLE E-V-A-2-2

Number of people used:
Number of skimmer(s) used:
Type of skimmer(s):
Oil-simulating material used:
Other equipment used:
Total time to deploy equipment:
Total time to deploy equipment: Total time equipment deployed:
Total time equipment deployed.
VI. RESULTS
Describe the effectiveness of the strategy employed. Please include shortfalls of
the Area Contingency Plan, problems experienced, and recommendations for
future revisions to the Plan.
VII. OTHER COMMENTS
PLEASE RETURN THIS SURVEY TO THE U.S. COAST GUARD MARINE SAFETY
OFFICE UPON COMPLETION OF EACH DRILL. THE INFORMATION THAT YOU
PROVIDE IS VITAL INDEVELOPING AN EFFECTIVE, REALISTIC OIL SPILL
CONTINGENCY PLAN.
CONTINUENCI FLAN.

ADDRESS: COMMANDING OFFICER

USCG MSQ SAN DIEGO 2716 NORTH HARBOR DRIVE SAN DIEGO, CA 92101-1064 ATTN: PLANNING OFFICER TEL:(619) 557-5877 FAX:(310) 557-6769

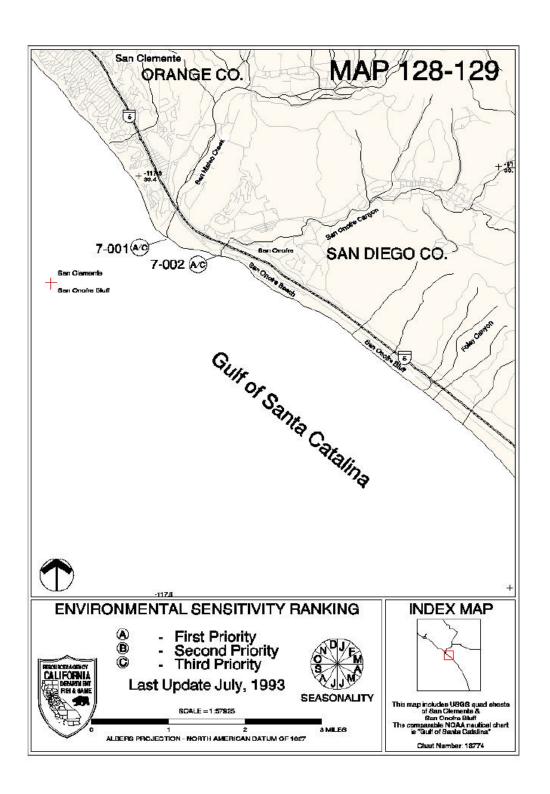
TABLE E-V-A-2-3

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Paradise Marsh	94-95		



SITE: 07-001 San Mateo Creek

COUNTY: San Diego

USGS QUAD: San Clemente

OSPR MAP NO. 128

LONG. 117° 35' 36"W

LAT. 33° 23' 06" N

SITE DESCRIPTION: San Mateo Creek forms the north border of San Onofre State Beach and is near the north border of San Diego County. It is a heavily vegetated riparian habitat, with two listed species to be aware of.

ACCESS: California Department of Parks and Recreation, San Onofre State Beach; Chief of Interpretive Program, Rich Gilland; Chief Lifeguard, Steve Long or District Supervisor, Jack Roggenbach. (714) 492-0802. Camp Pendleton base security can provide gate key at Trestles Lifeguard Station.

SEASONAL CONCERNS: During Winter, Spring and Summer months creek mouth may be open to tidal flooding.

PRIORITY: A - When creek mouth open C - When creek mouth closed

RESOURCES OF PRIMARY CONCERN: Numerous species of birds, invertebrates, terrestrial mammals, and emergent and riparian vegetation. Listed species: Tidewater Goby, a small fish in the lagoon Red Sand Verbenia, a plant located only on upper beach sand dunes

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone
CA Dept of Parks and Recreation		
•	Dave Pryor, Resource Ecologist	(714)848-1566
	Mike Tope, Chief Ranger	(714) 492-0802

REMARKS: Heavy equipment may be used to close the creek mouth by sand berm creation. Check status of creek mouth and consider rainfall potential which may affect the ability to maintain a closure. Response equipment may need to cross over rail road tracks for beach access. Approval and clearance will be needed.

SITE: 07-001 San Mateo Creek

SITE CHARACTERISTICS: Approximately 300 FT. across. Normally closed by natural sand berm but extreme high tides may wash over. Cultural resources located in this area. Earth moving equipment should approach from the beach face.

PROTECTION STRATEGIES:

PRIMARY: Enhance the existing sand berm at creek entrance.

RESOURCES: One bulldozer

SECONDARY: Two tier containment boom at entrance and second directly in front

of bridge.

RESOURCES: 2 X 400 Feet of containment boom. Total of 800 Feet. One small

boat with motor.

<u>COLLECTION POINT</u>: As appropriate

ACCESS AREA VIA: Exit Baseline Road from I-5. Use Tretles Lifeguard Station road for access to San Mateo Creek Beach Path. Heavy equipment should use this route, but will have to cross over the rail road tracks at the trestle. Clearance will be necessary in advance to avoid potential conflicts with rail traffic. A Second access can be achieved from San Orofre Lagoon (07-002) access about ½ mile down coast.

STAGING AREA: Staging is available at the end of the paved trail near the train trestle.

SITE: 07-002 San Onofre Creek

COUNTY: San Diego

USGS QUAD: San Clemente

OSPR MAP NO. 128

LONG. 117° 34' 48" W

LAT. 33° 22' 48" N

SITE DESCRIPTION: San Onofre Creek, San Onofre State Beach

<u>ACCESS</u>: California Department of Parks and Recreation, San Onofre State Beach; Chief of Interpretive Program Rich Gilliland; Chief Lifeguard Steve Long, District Supervisor Jack Roggenbach (714)492-0802.

SEASONAL CONCERNS: During Winter, Spring and Summer months creek mouth may be open to tidal flooding.

PRIORITY: A - When creek mouth is open C - When creek mouth is closed

RESOURCES OF PRIMARY CONCERN: Numerous species of birds, invertebrates, terrestrial mammals, and emergent and riparian vegetation.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone
CA Dept of Parks and Recreation		
	Dave Pryor, Resource Ecologist	(714)848-1566
	Mike Tope, Chief Ranger	(714) 492-0802

REMARKS: Heavy equipment may be used to close creek mouth by sand berm creation. Check status of creek mouth and consider rainfall potential, which may affect the ability to maintain a closure.

SITE: 07-002 San Onofre Creek

SITE CHARACTERISTICS: Approximately 300 feet wide. Normally closed by natural sand berm but high tides may was over.

PROTECTION STRATEGIES:

PRIMARY: Enhance existing sand berm.

RESOURCES: One bulldozer

SECONDARY: Two tier containment boom. One at entrance, second at train trestle.

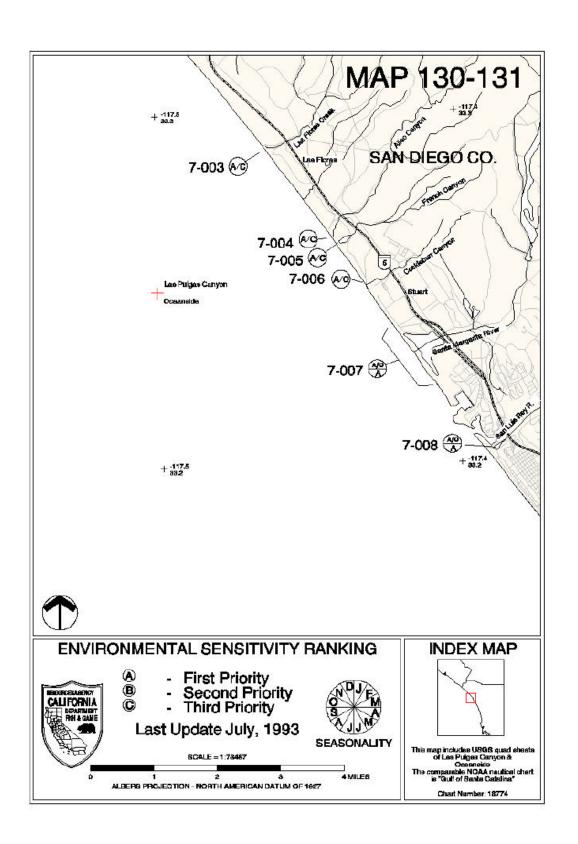
RESOURCES: 2 X 400' containment boom. Total 800 Feet. One small boat with motor would

be helpful.

COLLECTION POINT: As necessary

ACCESS AREA VIA: I-5, Basilone exit to Camp Pendleton entrance. Access beach/creek entrance via Beach Club Road. Alternate route at Basilone road to the west. Enter the Trestles Lifeguard Station road along the bluff top. Follow the dirt road southward. It will intersect the north shore of San Onofre lagoon.

STAGING AREA: Staging available at the end of Beach Club road at San Onofre lagoon.



SITE: 07-003 Las Flores Creek

COUNTY: San Diego

USGS QUAD: Las Pulgas

OSPR MAP NO. 130

LONG. 117° 27' 48" W

LAT. 33° 17' 18" N

SITE DESCRIPTION: Las Flores Creek, Camp Pendleton Marine Corps

ACCESS: U.S. Marine Corps approval necessary.

ACCESS AREA VIA: I-5, Las Pulgas RD. Exit to Camp Pendleton. Follow Stewart Mesa Rd to Las Flores Creek turn off.

SEASONAL CONCERNS: During Winter and Spring months creek mouth may be open to tidal flooding.

PRIORITY: A - When creek mouth is open

C - When creek mouth is closed

RESOURCES OF PRIMARY CONCERN: Numerous species of birds, invertebrates, terrestrial mammals, and emergent and riparian vegetation. Several listed species to be aware of: Tidewater Goby; Least Tern; Southwestern Pond Turtle.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone
Camp Pendleton Environmental S	Security Office	
Wildlife Biologist	Dave Boyer	(619)725-9737
Spill Response Coordinator	Tony Hudson	(619)725-9743/9769
Game Warden	Duty Game Warden	(619) 725-3360
Game warden	Duty Game warden	(019) 723-3300
Camp Pendleton Marine Corps	Duty Officer	(619) 725-5617

REMARKS: Check status of creek mouth and consider rainfall potential, which may affect the ability to maintain a closure.

SITE: 07-003 Las Flores Creek

SITE CHARACTERISTICS: Approximately 300 feet wide at entrance. Cultural resources located in this area. Earth moving equipment should approach from the beach face.

PROTECTION STRATEGIES

PRIMARY: Enhance the existing sand berm at creek entrance.

RESOURCES: One bulldozer

SECONDARY: Two tier containment boom. First at entrance, second 100 Feet upstream.

RESOURCES: 2 X 250 Foot containment boom. Total 500 Feet. 1 boat with motor

COLLECTION POINT: As appropriate and necessary.

ACCESS AREA VIA: I-5, Las Pulgas road. Exit to Camp Pendleton. Follow Stewart Mesa road south from Las Pulgas road to Red Beach access road leading to Las Pulgas lagoon. No gates encountered. Alternate route from I-5 exit Las Pulgas road to west. Will encounter a locked gate. Contact base personnel to unlock gate. This route is preferable for heavy equipment access.

STAGING AREA: Staging is available at the north shore of the lagoon.

SITE: 07-004 Aliso Canyon Creek

COUNTY: San Diego

USGS QUAD: Las Pulgas

OSPR MAP NO. 130

LONG. 117° 26' 26" W

LAT. 33° 15' 42" N

SITE DESCRIPTION: Aliso Canyon Creek, Camp Pendleton Marine Corps Base

ACCESS: U.S. Marine Corps approval necessary

SEASONAL CONCERNS: During Winter and Spring months creek mouth may be open to tidal flooding.

PRIORITY: A - When creek mouth is open

C - When creek mouth is closed

RESOURCES OF PRIMARY CONCERN: Numerous species of birds, invertebrates, terrestrial mammals, and emergent vegetation. Least tern nesting colony present spring and summer. Snowy Plover present year round.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone	
Camp Pendleton Environmental Security Office			
Wildlife Biologist	Dave Boyer	(619)725-9737	
Spill Response Coordinator	Tony Hudson	(619)725-9743/9769	
Game Warden	Duty Game Warden	(619) 725-3360	
Camp Pendleton Marine Corps	Duty Officer	(619) 725-5617	

REMARKS: Heavy equipment may be used to close creek mouth by sand berm creation. Check status of creek mouth and consider rainfall potential, which may affect the ability to maintain a closure.

SITE: 07-004 Aliso Canyon Creek

SITE CHARACTERISTICS: Approximately 100' across. Normally closed by natural sand berm but high tides may wash over. Least Terns and Western Snowy Plover nest in this area.

PROTECTION STRATEGIES

PRIMARY: Enhance the existing sand berm at the creek entrance.

RESOURCES: 1 Bulldozer

SECONDARY: 2 Tier cont. boom. 1st at entrance. Two small channels fork behind mouth. Each will require 50' boom sections.

RESOURCES: 2 X 50' of cont. boom. 1 x 100' of cont. Boom Total=200'

COLLECTION POINT: N/A

ACCESS AREA VIA: Access via Camp Pendleton at White Beach access road off Stewart Mesa road. Aliso Canyon Creek and nearby French Canyon Creek are accessed this route. This road is subject to poor conditions. Alternate access is possible via Cockleburr Creek and north along the beach.

STAGING AREA: Staging is available near the beach at Aliso Canyon Creek.

SITE: 07-005 French Canyon Creek

COUNTY: San Diego

USGS QUAD: Las Pulgas

OSPR MAP NO. 130

LONG. 117° 25' 54" W

LAT. 33° 15' 00" N

SITE DESCRIPTION: French Canyon Creek, Camp Pendleton Marine Corps Base

ACCESS: U.S. Marine Corps approval necessary

SEASONAL CONCERNS: During Winter and Spring months when creek mouth may be open to tidal flooding.

PRIORITY: A - When creek mouth is open

C - When creek mouth is closed

RESOURCES OF PRIMARY CONCERN: Numerous species of birds, invertebrates, terrestrial mammals, and emergent and riparian vegetation. Least Tern nesting colony present spring and summer. Snowy Plover present year round.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone	
Camp Pendleton Environmental Security Office			
Wildlife Biologist	Dave Boyer	(619)725-9737	
Spill Response Coordinator	Tony Hudson	(619)725-9743/9769	
Game Warden	Duty Game Warden	(619) 725-3360	
Camp Pendleton Marine Corps	Duty Officer	(619) 725-5617	

REMARKS: Heavy equipment may be used to close creek mouth by sand berm creation. Check status of creek mouth and consider rainfall potential, which may affect the ability to maintain a closure.

SITE: 07-005 French Canyon Creek

SITE CHARACTERISTICS: Approximately 100' wide. Normally closed by natural sand berm. May open only during periods of high rain.

PROTECTION STRATEGIES

PRIMARY: Enhance sand berm if necessary.

RESOURCES: 1 Bulldozer

SECONDARY: I tier of containment boom behind berm.

RESOURCES: 100' containment boom

<u>COLLECTION POINT:</u> As necessary and appropriate.

ACCESS AREA VIA: Camp Pendleton at White Beach access road off Stewart Mesa road to Aliso Canyon and French Canyon Creeks. This road is subject to poor conditions. Alternate access is possible via Cockleburr Creek then north along the beach.

STAGING AREA: Staging is available near the beach at Aliso Canyon Creek.

SITE: 07-006 Cockleburr Canyon

COUNTY: San Diego

USGS QUAD: Las Pulgas

OSPR MAP NO. 130

LONG. 117° 25' 18" W

LAT. 33° 14' 14" N

SITE DESCRIPTION: Cockleburr Canyon Creek, Camp Pendleton Marine Corps Base

ACCESS: U.S. Marine Corps approval necessary

ACCESS AREA VIA: Camp Pendleton at Vandergrift Rd., Stuart Mesa Rd, turn off at Santa Margarita River, follow dirt road to beach bluff, 1 gate possibly locked, will be encountered. **SEASONAL CONCERNS**: During Winter and Spring months creek mouth may be open to tidal flooding.

PRIORITY: A - When creek mouth is open

C - When creek mouth is closed

RESOURCES OF PRIMARY CONCERN: Numerous species of birds, terrestrial mammals, and emergent vegetation. Several listed species to be aware of: California Gnatcatcher; Southwestern Pond Turtle; Tidewater Goby.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone	
Camp Pendleton Environmental Security Office			
Wildlife Biologist	Dave Boyer	(619)725-9737	
Spill Response Coordinator	Tony Hudson	(619)725-9743/9769	
Game Warden	Duty Game Warden	(619) 725-3360	
Camp Pendleton Marine Corps	Duty Officer	(619) 725-5617	

<u>REMARKS:</u> Check status of creek mouth and consider rainfall potential, which may affect the ability to maintain a closure.

SITE: 07-006 Cockleburr Creek

SITE CHARACTERISTICS: Approximately 100' across. Normally closed by natural sand berm.

PROTECTION STRATEGIES

PRIMARY: Enhance sand berm

RESOURCES: 1 Bulldozer

SECONDARY: N/A

RESOURCES: None

COLLECTION POINT: N/A

ACCESS AREA VIA: Stewart Mesa road to MECTSSA overpass at I-5. Continue straight ahead to beach bluff. Cockleburr creek lagoon is on the right side below the bluff.

STAGING AREA: Staging area is available at the bluff top.

SITE: 07-007 Santa Margarita River

COUNTY: San Diego

USGS QUAD: Oceanside

OSPR MAP NO. 131

LONG. 117° 24' 54" W

LAT. 33° 13' 48" N

SITE DESCRIPTION: Santa Margarita River Mouth at Camp Pendleton (south border)

ACCESS: U.S. Marine Corps approval necessary

ACCESS AREA VIA: Camp Pendleton at Vandergrift Rd., Stuart Mesa Rd. to Santa Margarita River turn off, follow dirt road to beach bluff. 1 gate, possibly locked, will be encountered West of I-5.

SEASONAL CONCERNS: Winter, Spring and Summer months the river is most active and the mouth is more likely to be open. Spring and Summer are endangered bird species breeding periods.

PRIORITY: A - Spring and summer endangered species may be present

A - Autumn and winter if river mouth is open C - Autumn and winter if river mouth is closed

RESOURCES OF PRIMARY CONCERN: Numerous species of birds and invertebrates, and marsh land. Snowy Plover, California Least Tern and Belding's Savannah Sparrow nesting area. Brown Pelican feeding and resting area.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone		
Camp Pendleton Environmental Security Office				
Wildlife Biologist	Dave Boyer	(619)725-9737		
Spill Response Coordinator	Tony Hudson	(619)725-9743/9769		
Game Warden	Duty Game Warden	(619) 725-3360		
Camp Pendleton Marine Corps	Duty Officer	(619) 725-5617		

REMARKS: Heavy equipment may be used to close the river mouth. Least Tern nesting sites are in fenced area. Consult biologists prior to any action during spring and summer.

SITE: 07-007 Santa Margarita River

SITE CHARACTERISTICS: Approximately 500' at entrance. Affected by tidal action. Strong current flow. Active and normally open. Least Turns and Snowy Plover nest in this area, both up and down coast of the river mouth, and in sand flats behind the river mouth.. Coastal Nesting area is fenced off and marked. Water depths vary from several inches to several feet but most water depths will be less than 3 feet near the river mouth at low tide.

PROTECTION STRATEGIES

PRIMARY: Create sand berm/dike with underflow dam at a distance from entrance such that it is not affected by wave action. Mild wave action may affect a berm during high tide.

RESOURCES: 1 possibly 2 Bulldozers

SECONDARY: 2 Tier cont. boom, 1st at a distance from entrance such that it is not affected by wave action, 2nd 100' upstream. The lagoon area may vary greatly from season to season. Boom length requirements will vary accordingly.

RESOURCES: 2000' Boom, and anchors will be required. Small shallow draft boats can be used. Fout wheel drive vehicles strongly recommended.

COLLECTION POINT: As necessary and appropriate.

<u>ACCESS AREA VIA:</u> Camp Pendleton at Vandergrift road to Stuart Mesa road then north to first left turn after river, follow dirt road to beach bluff. 1 gate possibly locked, will be encountered west of I-5.

Alternate route #1: Stuart Mesa road to the MECTSSA overpass at I-5. Take first left onto dirt road around agriculture field perimeter southward to the estuary overlook.

Alternate route #2: This route leads to the south shore of the river mouth. Enter Camp Pendleton at main gate. Take freeway (I-5) overpass following signs to Club Del Mar recreational beach, turn right at beach, go north 1 mile.

STAGING AREA: Staging is limited to the bluff area ½ mile north of river mouth, and beach face on the south side of river mouth.

SITE: 07-008 San Luis Rey River

COUNTY: San Diego

USGS QUAD: Oceanside

OSPR MAP NO. 131

LONG. 117° 23' 24" W

LAT. 33° 12' 00" N

SITE DESCRIPTION: San Luis Rey River Mouth at Oceanside

ACCESS: In the city of Oceanside, from Harbor Dr. on the north side of the river, from Pacific St. or the strand at Ninth St. on the south side of the river.

SEASONAL CONCERNS:

PRIORITY: A - Spring & Summer endangered species may be present

A - Autumn and Winter if river mouth open C - Autumn and Winter if river mouth closed

RESOURCES OF PRIMARY CONCERN: Numerous species of birds and emergent vegetation; Snowy Plover and California Least Tern nesting area.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone
CA Dept of Fish & Game	Terry Stewart	(619) 467-4209
	Tim Dillingham	(619) 467-4204

REMARKS: Heavy equipment may be used to close the river mouth on the downstream side of the river crossing when endangered species are not present during periods of low river flow. Nesting sites may be vulnerable to all traffic (vehicular or foot). Consult biologists prior to any action during spring and summer.

REFERENCES: City of Oceanside Master Plan

SITE: 07-008 San Luis Rey River

SITE CHARACTERISTICS: Approximately 50' wide. 7 culverts under the road at north end of road crossing. One culvert at south end of road crossing These pipes may be submerged only during extreme high tide conditions.

PROTECTION STRATEGIES

PRIMARY: Sand bags across culverts on upstream ends.

RESOURCES: 10 People, 10 Shovels, 500 Bags, Sand.

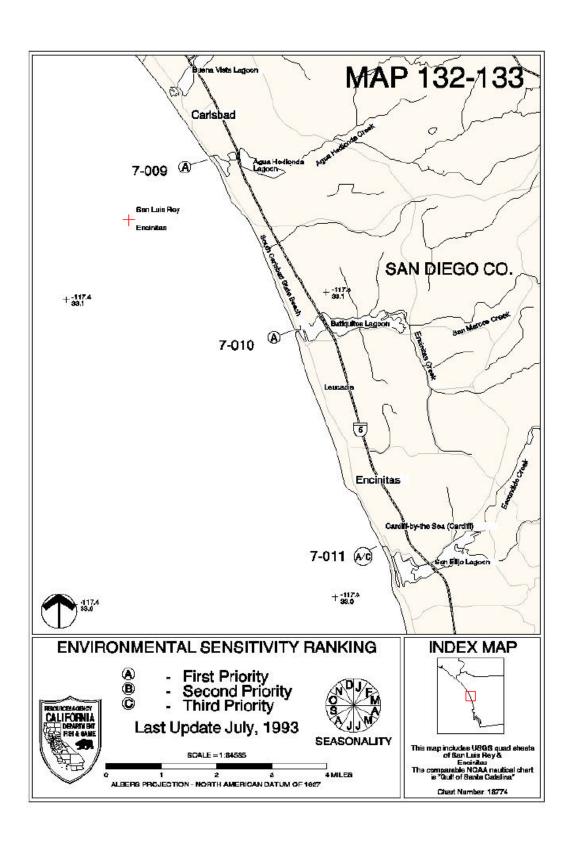
SECONDARY: Sand berm construct downstream from culverts to complete mouth closure of forebay lagoon. May need to provide underflow capability at second berm.

RESOURCES: 1 Bulldozer

COLLECTION POINT: As appropriate

ACCESS AREA VIA: I-5, Harbor Drive exit toward Oceanside marina, follow to Harbor Drive south which leads to south end of marina and parallels river to entrance.

STAGING AREA: Staging area is available at the river mouth parking lot on the north side of the river crossing road.



SITE: 07-009 Agua Hedionda Lagoon

COUNTY: San Diego

USGS QUAD: San Luis Rey

OSPR MAP NO. 132

LONG. 117° 20' 42" W

LAT. 33° 08' 42" N

SITE DESCRIPTION: Agua Hedionda Lagoon, Carlsbad

ACCESS: In the City of Carlsbad at Pacific Coast Highway near Tamarack Ave. A small parking lot is adjacent to the lagoon entrance north jetty.

ACCESS AREA VIA: I-5 to Tamarack Ave. Exit left onto Carlsbad Ave. to lagoon.

SEASONAL CONCERNS: None

PRIORITY: A - Year round

RESOURCES OF PRIMARY CONCERN: Numerous species of birds, Bay Scallops, Aquaculture Site (mussels, abalone and white seabass); endangered species in lagoon area include California Brown Pelican, Light-Footed Clapper Rail, California Least Tern and Snowy Plover; endangered species threatened during feeding and nesting.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone
CA Dept of Fish & Game	Tim Dillingham	(619) 467-4204

REMARKS: A sand berm is not possible due to large tidal exchange. A narrow constriction separates the seaward portion of the bay from the much larger landward portion of the bay. Multiple deflection booms may be necessary at both outer and inner tidal inlets.

Operators of the San Diego Gas and Electric Power Plant and the Aquaculture Facilities should be notified **immediately**.

REFERENCES:

City of Carlsbad Master Plan Natural Resources of Agua Hedionda Lagoon (1976)

SITE: 07-009 Agua Hedionda Lagoon

SITE CHARACTERISTICS: Entrance approximately 200 feet wide. Rip rap jetties form entrance. Permanently open and effected by wave action and strong tidal currents. San Diego Gas and Electric's Encina Generating Plant takes cooling water from this lagoon.

PROTECTION STRATEGIES

PRIMARY: 2 Tier deflection boom. First east of Pacific Coast Highway bridge. Second upstream deflecting to skimmers on northeast shoreline.

RESOURCES: 2 X 500' Containment boom, 1 Utility Boat.

SECONDARY: 2 Tier diversion boom. First west of railroad bridge, second east of railroad bridge.

RESOURCES: 2 X 100' Containment boom, 1 Utility Boat.

COLLECTION POINT: Northeastern shoreline.

ACCESS AREA VIA: I-5 to Tamarack Ave. Exit left onto Carlsbad Ave. to lagoon.

STAGING AREA: Staging areas are found off Pacific Coast Highway on the western shore of the lagoon and immediately north of the northern jetty at the public parking lot. Boat launch ramps are located at SDG&E power plant and east of I-5 on the inner lagoon.

SITE: 07-010 Batiquitos Lagoon

COUNTY: San Diego

USGS QUAD: Encinitas

OSPR MAP NO. 133

LONG. 117° 18' 48" W

LAT. 33° 05' 12" N

SITE DESCRIPTION: Batiquitos Lagoon, South Carlsbad

ACCESS: South end of the City of Carlsbad on Pacific Coast Highway. Limited parking is available along the highway at the south side of the lagoon mouth.

ACCESS AREA VIA: Access via Pacific Coast Hwy.

SEASONAL CONCERNS: Endangered Brown Pelican feeds year round; endangered California Least Tern and Snowy Plover feed and nest during Spring and Summer. Autumn and Winter have large increases in migratory waterfowl and shorebirds.

PRIORITY: A - Year round

RESOURCES OF PRIMARY CONCERN: Numerous species of birds, emergent vegetation, migrant waterfowl; Calif. Least Tern, Calif. Brown Pelican and Belding's Savannah Sparrow.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone
CA Dept of Fish & Game	Tim Dillingham	(619) 525-4215
CA Dept of Parks & Recreation	Mike Wells	(619) 452-8732

REMARKS: Check status of lagoon mouth and consider rainfall potential, which may affect the ability to maintain a closure. By 1997 a permanent mouth opening will be completed

REFERENCES: Batiquitos Lagoon Enhancement Environmental Impact Statement

SITE: 07-010 Batiquitos Lagoon

SITE CHARACTERISTICS: Approximately 200' wide. Normally closed by gravel berm. High tides may wash over. Least Turns nest in this area.

PROTECTION STRATEGIES

PRIMARY: Enhance natural gravel berm.

RESOURCES: 1 Backhoe or front loader

SECONDARY: 2 Tier containment. First east of Pacific Coast Hwy southbound bridge, second east of Pacific Coast Hwy northbound bridge.

RESOURCES: 2 X 200' Containment boom, one utility boat. Boat launch is possible cast of I-5 in the back lagoon.

COLLECTION POINT: As appropriate and necessary

ACCESS AREA VIA: Access via Pacific Coast Hwy.

STAGING AREA: Staging area is available adjacent to Pacific Coast Highway on the north and south sides of the lagoon mouth.

SITE: 07-011 San Elijo Lagoon

COUNTY: San Diego

USGS QUAD: Encinitas

OSPR MAP NO. 133

LONG. 117° 16' 54" W

LAT. 33° 01' 00" N

SITE DESCRIPTION: San Elijo Lagoon, South Encinitas

<u>ACCESS</u>: Pacific Coast Highway at Cardiff By The Sea State Beach parking lot where equipment staging may also occur. Lagoon area is managed by County Parks and California Department of Fish and Game.

SEASONAL CONCERNS: California Least Tern, Snowy Plover and Belding's Savannah Sparrow nesting Spring and Summer, Clapper Rail and Brown Pelican present year round.

PRIORITY: A - When lagoon mouth is open C - When lagoon mouth is closed

RESOURCES OF PRIMARY CONCERN: Numerous species of birds, emergent vegetation; Light-Footed Clapper Rail, California Brown Pelican, Belding's Savannah Sparrow, California Least Tern and Snowy Plover

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone
CA Dept of Fish and Game	Tim Dillingham	(619) 467-4204
CA Dept of Parks and Recreation	Mike Wells	(619) 452-8732
County Parks Ranger	Robert Patton	(619) 792-8417

REMARKS: Check status of lagoon mouth and consider rainfall potential, which may affect the ability to maintain a closure.

REFERENCES: City of Encinitas Master Plan

SITE: 07-011 San Elijo Lagoon

SITE CHARACTERISTICS: Approximately 150' wide at Pacific Coast Highway bridge. Normally closed by natural cobble and sand berm. Extremely high tides may wash over the berm. In recent year have seen a maintained opening.

PROTECTION STRATEGIES

PRIMARY: Enhance natural sand/cobble berm.

RESOURCES: 1 Bulldozer.

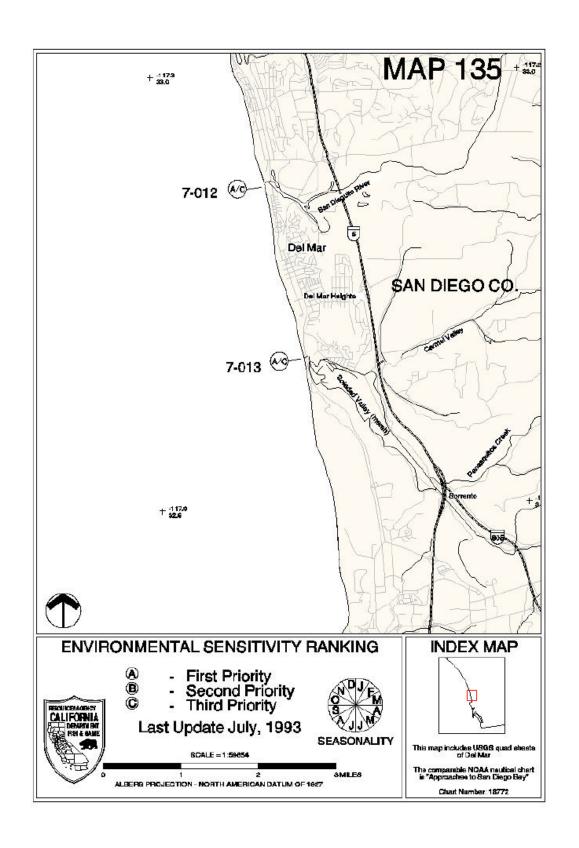
SECONDARY: Two tier diversion boom. First west of Pacific Coast Hwy bridge, second east of Pacific Coast Hwy bridge.

RESOURCES: 2 X 200' Containment boom. Total 400'. One utility boat.

COLLECTION POINT: As necessary

ACCESS AREA VIA: Pacific Coast Highway.

STAGING AREA: Staging area is located in the State Park parking lot immediately south of the lagoon mouth.



SITE: 07-012 San Dieguito Lagoon

COUNTY: San Diego

USGS QUAD: Del Mar

OSPR MAP NO. 135

LONG. 117° 16' 12" W

LAT. 32° 58' 30" N

SITE DESCRIPTION: San Dieguito Lagoon, Cities of Solana Beach and Del Mar.

ACCESS: Access from Pacific Coast Highway but parking is limited to roadside parallel to traffic flow. Very little space for staging of equipment. A small access road is available at the west side on the north end of the PCH bridge. The Del Mar Fairgrounds is a potential alternative staging area for equipment.

SEASONAL CONCERNS: Snowy Plovers and Belding's Savannah Sparrow present Spring and Summer. Migratory birds Autumn and Winter. Brown Pelican present year round.

PRIORITY: A - When lagoon mouth is open

C - When lagoon mouth is closed

RESOURCES OF PRIMARY CONCERN: Numerous species of birds, emergent vegetation and terrestrial mammals. Endangered species include: California Brown Pelican, Snowy Plover, Belding's Savannah Sparrow, and California Least Terns.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone
CA Dept of Fish and Game	Tim Dillingham	(619) 467-4204

REMARKS: Check status of the lagoon mouth and consider rainfall potential, which may affect the ability to maintain a closure.

REFERENCES: City of San Diego Master Plan

SITE: 07-012 San Dieguito Lagoon

SITE CHARACTERISTICS: Approximately 100-1000 FT wide depending on rain conditions. Has been open but may be closed by natural sand berm. Cultural resources are located in this area.

PROTECTION STRATEGIES

PRIMARY: Enhance/construct sand berm.

RESOURCES: 2 Bulldozers.

SECONDARY: 2 Tier diversion boom. First just east of Pacific Coast Hwy bridge, second just west of Pacific Coast Highway bridge.

RESOURCES: 2 X 200' Containment boom. Total 400', one Utility boat.(May need to increase boom during periods of high rain)

COLLECTION POINT: As necessary

ACCESS AREA VIA: Pacific Coast Hwy.

STAGING AREA: A small staging area is located just west of Pacific Coast Highway at the north end of the bridge.

SITE: 07-013 Los Penasquitos Lagoon

COUNTY: San Diego

USGS QUAD: Del Mar

OSPR MAP NO. 135

LONG. 117° 15' 36" W

LAT. 32° 56' 00" N

SITE DESCRIPTION: Los Penasquitos Lagoon at Torrey Pines State Park

ACCESS: From Pacific Coast Highway on the southside of McGonagle road at the State Beach. Parking and staging areas are available at the mouth of the lagoon.

SEASONAL CONCERNS: Endangered California Least Tern, Snowy Plover and Belding's Savannah Sparrow present Spring and Summer, Brown Pelican present year round. Migratory waterfowl present during Autumn and Winter months. Clapper Rails may also be found in this area.

PRIORITY: A - When lagoon mouth is open

C - When lagoon mouth is closed

RESOURCES OF PRIMARY CONCERN: Numerous species of birds, mudflats and marsh vegetation. California Brown Pelican, Snowy Plover, Belding's Savannah Sparrow, Least Terns.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone
CA Dept of Fish and Game	Tim Dillingham	(619) 467-4204
•	C	
CA Dept of Parks	Mike Wells	(619) 452-8732
and Recreation		,

REMARKS: Heavy equipment may be used to close the lagoon mouth by sand berm creation. Check status of lagoon mouth and consider rainfall potential, which may affect the ability to maintain a closure.

REFERENCES: City of San Diego Master Plan

SITE: 07-013 Los Penasquitos Lagoon

SITE CHARACTERISTICS: Approximately 300' wide at widest point. Normally open and effected by tides. Snowy Plover nest in this area.

PROTECTION STRATEGIES

PRIMARY: Construct sand berm east of Pacific Coast Hwy bridge.

RESOURCES: One bulldozer.

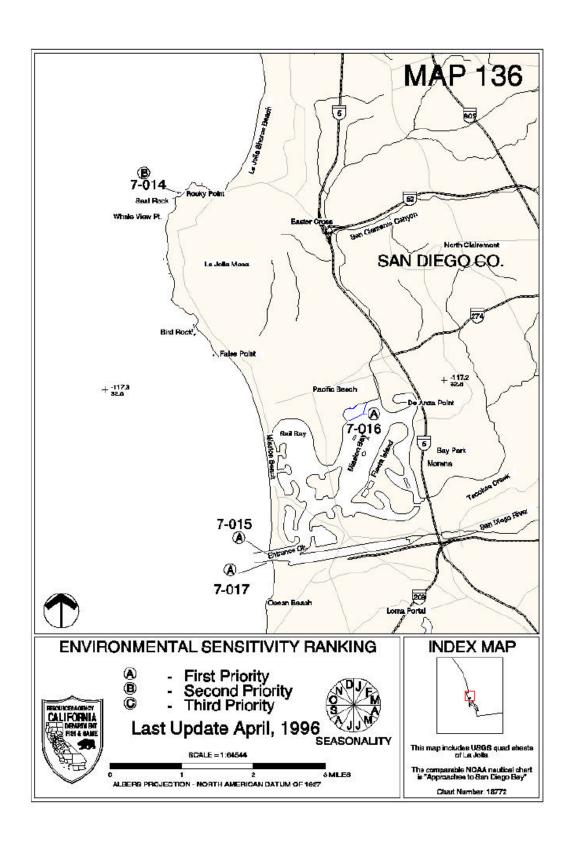
SECONDARY: Single tier containment boom on each of two wetland channels. North channel approx. 200' wide. South channel approx. 100' wide.

RESOURCES: 300' containment boom

COLLECTION POINT: As necessary

ACCESS AREA VIA: South side of McGonagle road near intersection with Pacific Coast Highway.

STAGING AREA: State beach parking lot off McGonagle road on north side of lagoon mouth.



SITE: 07-014 La Jolla Peninsula

COUNTY: San Diego
USGS QUAD: La Jolla

COUNTY: San Diego
LONG. 117° 16' 38" W
LAT. 32° 50' 50" N

SITE DESCRIPTION: La Jolla Peninsula at Seal Rock near the children's pool beach

ACCESS: Beach access available at Coast Blvd. off of Prospect St.; limited staging area is available. Parking is available on Coast Blvd.

SEASONAL CONCERNS: Marine mammal haul-out site

PRIORITY: B - Year round

RESOURCES OF PRIMARY CONCERN: Harbor Seals

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone
CA Dept of Fish & Game	Doyle Hanan	(619) 546-7170
Nat'l. Marine Fisheries Servi	ce	
	Jim Carreta	(619) 546-7181
	Mark Kline	(619) 557-5494

REMARKS: The haul-out site has been designated a protected area by the City of San Diego.

SITE: 07-014 La Jolla Peninsula (Seal Rock)

SITE CHARACTERISTICS: Rocky projection which is continuously effected by wave action. Harbor Seals haul out on this rocky area.

PROTECTION STRATEGIES

PRIMARY: No protection possible due to wave action.

RESOURCES:

SECONDARY: N/A

RESOURCES:

COLLECTION POINT: N/A

ACCESS AREA VIA: Prospect Street to Coast Blvd.

SITE: 07-015 Mission Bay Entrance

COUNTY: San Diego

USGS QUAD: La Jolla

OSPR MAP NO. 136

LONG. 117° 15' 30" W

LAT. 32° 45' 24" N

SITE DESCRIPTION: Mission Bay Entrance, Mission Bay

ACCESS: City of San Diego and Mission Bay Harbor Police manage the entire bay. Numerous parking and staging areas are located around the bay.

ACCESS AREA VIA: South Mission Beach Parking lot.

SEASONAL CONCERNS: California Brown Pelicans feed and rest year round; California Least Terns and Snowy Plovers nesting and feeding during Spring and Summer.

PRIORITY: A - Year round

RESOURCES OF PRIMARY CONCERN: Numerous species of birds; rocky (rip-rap) intertidal invertebrates at entrance channel; inner bay sandy beaches.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone
City of San Diego	Ms. Robin Stribley	(619) 525-8219

REMARKS: Entrance channel may be boomed to prevent or minimize oil entry from open coastal area.

REFERENCES: Mission Bay Master Plan

SITE: 07-015 Mission Bay Entrance

<u>SITE CHARACTERISTICS:</u> Approximately 500' wide. Rip-rap jetties form entrance. Open and effected by tidal influence. Mariner's Basin has a high concentration of Least Tern nesting sites.

PROTECTION STRATEGIES

PRIMARY: Two tier booming strategy with deflection booms placed at entrance to the bay.

RESOURCES: 7800' of boom, 4 Utility boats, anchoring systems.

SECONDARY: Beach cleaning on north side of jetty.

RESOURCES: Beach grooming equipment

COLLECTION POINT: As necessary

ACCESS AREA VIA: South Mission Beach Parking lot.

SITE: 07-016 Kendall-Frost Reserve

COUNTY: San Diego

USGS QUAD: La Jolla

OSPR MAP NO. 136

LONG. 117° 13' 00" W

LAT. 32° 47' 37" N

SITE DESCRIPTION: Kendall-Frost Reserve, North Mission Bay

<u>ACCESS</u>: Access from North Mission Bay Drive at Crown Point Drive. Site is managed by UC San Diego. Contact Ms. Izabell Kay (619) 534-2077.

SEASONAL CONCERNS:

PRIORITY: A - Year round

RESOURCES OF PRIMARY CONCERN: Numerous species of birds and marsh vegetation. Endangered Light-Footed Clapper Rail present year round. California Least Tern and Belding's Savannah Sparrow nest during Spring and Summer.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone
UC San Diego	Ms. Izabell Kay	(619) 534-2077
City of San Diego	Ms. Robin Stribley	(619) 525-8219
	Mr. Mike Behan	(619) 221-8912
Scripps Inst. of	Ms. Lisa Levin	(619) 534-3579
Oceanography		

REMARKS:

REFERENCES: Mission Bay Master Plan

SITE: 07-016 Kendall-Frost Reserve

SITE CHARACTERISTICS: Inside Mission Bay. Northwest corner of Fiesta Bay. Wetland area with tidal channels.

PROTECTION STRATEGIES

PRIMARY: Sandbag tidal channel entrances if oil were to enter Fiesta Bay.

RESOURCES: 10 People, 10 Shovels, 250-500 Sand Bags, 2 tons Sand

SECONDARY: Harbor boom along beach face

RESOURCES: 2000' boom, 1 work boat, anchor system

<u>COLLECTION POINT:</u> Sandy beach south of Kendall-Frost reserve.

ACCESS AREA VIA: I-5 to Grand Ave. West to Morrel Street.

STAGING AREA: A large public parking lot is within 100 yards of the south end of Kendall-Frost reserve.

SITE: 07-017 San Diego River Mouth

COUNTY: San Diego

USGS QUAD: La Jolla

OSPR MAP NO. 136

LONG. 117° 15' 12" W

LAT. 32° 45' 18" N

SITE DESCRIPTION: San Diego River Mouth - City of San Diego

ACCESS: City of San Diego and Mission Bay Harbor Patrol control access to parking and staging areas on the north and south sides of the river mouth.

SEASONAL CONCERNS: Numerous species of birds; autumn migratory birds, endangered Snowy Plover. California Least Terns can also be found in this area. Intertidal sandflats and mudflats.

PRIORITY: A - Year round

RESOURCES OF PRIMARY CONCERN: Snowy Plover nesting Spring through Summer, migrating birds present Autumn and Winter. California Least Tern nesting and foraging.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone
City of San Diego	Ms. Robin Stribley	(619) 525-8219
	Ms. Terri Williams	(619) 221-8910

REMARKS: River mouth may be closed by sand berm or oil boom, except during periods of rainfall, when a large discharge volume may occur.

SITE: 07-017 San Diego River Mouth

SITE CHARACTERISTICS: Approximately 100' across (subject to change with increased rainfall)

PROTECTION STRATEGIES

PRIMARY: Construct sand berm across entrance, upstream from breakwater notch.

RESOURCES: 1 Bulldozer, utilize available sand.

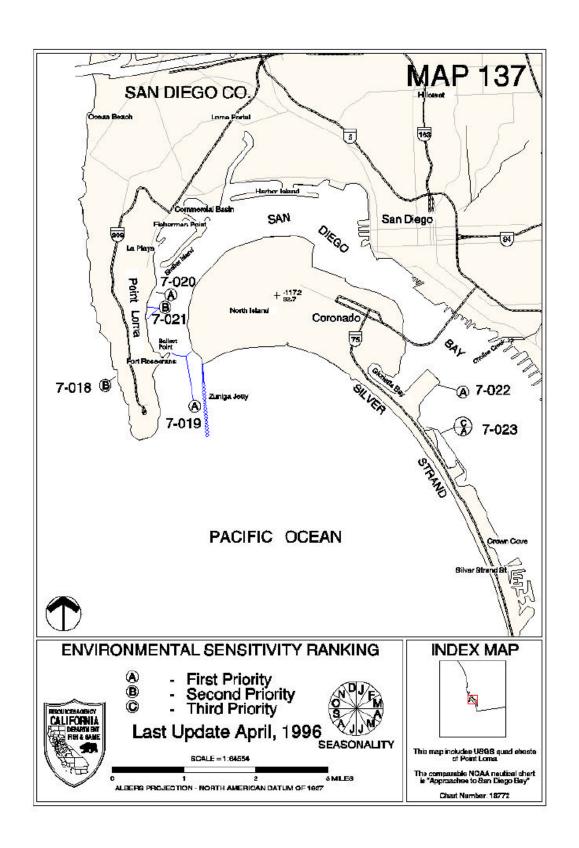
SECONDARY: Second berm at forward downstream end of breakwater notch.

RESOURCES:

COLLECTION POINT: South Beach

ACCESS AREA VIA: Ocean Beach parking lot

STAGING AREA: Ocean Beach parking lot.



 SITE: 07-018 Point Loma
 OSPR MAP NO. 137

 COUNTY: San Diego
 LONG. 117° 14' 54" W

 USGS QUAD: Point Loma
 LAT. 32° 40' 56" N

<u>SITE DESCRIPTION:</u> Point Loma, south end at sewage treatment plant. The site consists of rock island and a ledge used as haul-out for harbor seals.

ACCESS: Access achieved by boat only. The site is protected by sheer vertical cliffs, offering no landward access.

SEASONAL CONCERNS: None

PRIORITY: B - Year round

RESOURCES OF PRIMARY CONCERN: Harbor Seals

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone
CA Dept of Fish & Game	Doyle Hanan	(619) 546-7170
Nat'l Marine Fisheries Servi	ce	
	Jim Carreta	(619) 546-7181
	Mark Kline	(619) 557-5494

REMARKS:

SITE: 07-018 Point Loma (Harbor Seal Rocks)

SITE CHARACTERISTICS: Extremely rocky coastline which is continuously effected by strong wave action.

PROTECTION STRATEGIES

PRIMARY: No protective action possible due to strong wave action and hazardous conditions.

RESOURCES:

SECONDARY: N/A

RESOURCES:

COLLECTION POINT: N/A

ACCESS AREA VIA: No safe access available.

SITE: 07-019 Entrance San Diego Bay

COUNTY: San Diego

USGS QUAD: Point Loma

OSPR MAP NO. 137

LONG. 117° 13' 42" W

LAT. 32° 40' 00" N

SITE DESCRIPTION: Entrance to San Diego Bay

ACCESS:

SEASONAL CONCERNS: None

PRIORITY: A - Year round

RESOURCES OF PRIMARY CONCERN: Numerous species of birds including endangered California Brown Pelican and California Least Tern and Snowy Plover. Endangered Green Sea Turtle transit the bay.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone
San Diego Port District	Melissa Mailander	(619) 686-6254
San Diego Harbor Police	Dispatch	(619) 686-6272

REMARKS: Large tidal volume, flood and ebb tides may exceed 2 knots.

REFERENCES: South San Diego Bay Enhancement Plan (1990)

San Diego Port District Master Plan, Final EIR (1980)

SITE: 07-019 Entrance to San Diego Bay

SITE CHARACTERISTICS: Approximately 2000' wide at Ballast Point. Cultural resources located in this area.

PROTECTION STRATEGIES

PRIMARY: Cross-channel cascading deflection boom.

RESOURCES: 6000' Cont. boom (4 X 1500' sections), 3 Work boats, anchoring systems.

SECONDARY: Deflection booms along western shore of N.A.S. N.I.

RESOURCES: 3 X 1500', Anchoring systems, 3 Workboats.

COLLECTION POINT: Western shore of N.A.S. N.I.

ACCESS AREA VIA: North Island, Ballast Point, or by water.

SITE: 07-020 USN Marine Mammals Research Center
COUNTY: San Diego
USGS QUAD: Point Loma

OSPR MAP NO. 137
LONG. 117° 14' 15" W
LAT. 32° 41' 52" N

SITE DESCRIPTION: US Navy Marine Mammals Research Center at NRAD

ACCESS: Mammals are maintained by Navy personnel. Oil spills presenting a hazard to these animals should be reported to naval facility contacts listed below.

SEASONAL CONCERNS:

PRIORITY: A - Year round

RESOURCES OF PRIMARY CONCERN: Marine Mammals - Porpoises, Sea Lions, Dolphins

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone
U.S. Navy NRAD	Dr. Sam Ridgeway	
	Mammal Training Facility	(619) 553-1374 or
		(619) 493-1311
	Marilyn Taylor	
	Environmental Engineer	(619) 553-5027
US Navy Explosive		(619) 553-9901 or
Ordinance Disposal		(619) 553-9902
Duty Personnel		
Cycles Marine Maranella Cycton		(619) 553-8816
Subbase Marine Mammals System		(019) 333-0010

REMARKS: Animals are kept in holding areas and cannot escape contaminants.

SITE: 07-020 USN Marine Mammal Research Center

SITE CHARACTERISTICS: Numerous marine mammal pens.

PROTECTION STRATEGIES

PRIMARY: Place boom around all occupied mammal pens.

RESOURCES: 750' Containment boom.

SECONDARY: Remove marine mammals to unaffected area.

RESOURCES:

COLLECTION POINT: N/A

ACCESS AREA VIA: Rosecrans Street to Naval SUBASE entrance, turn left after entering SUBASE.

SITE: 07-021 Navy Magnetic Silencing Facility

COUNTY: San Diego

USGS QUAD: Point Loma

OSPR MAP NO. 137

LONG. 117° 12' 36" W

LAT. 32° 44' 00" N

SITE DESCRIPTION: A sandy beach approximately 1,000 ft long adjacent to the Magnetic Silencing Facility at the Point Loma Submarine Base

ACCESS: US Navy

SEASONAL CONCERNS: None

PRIORITY: B - Year-round

RESOURCES OF PRIMARY CONCERN: Large numbers of wading and diving birds utilize this beach for feeding and resting.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone
USN Natural Resource	Tim Burr	(619) 532-3745
Specialist		

REMARKS:

SITE: 07-021 Navy Magnetic Silencing Facility

<u>SITE CHARACTERISTICS:</u> Sand beach approximately 1,000 ft long utilized by large numbers of birds for feeding and resting.

PROTECTION STRATEGIES

PRIMARY: Along shore protection deflection booming

RESOURCES: 1,500 ft harbor boom, utility boat, and 3 anchors

SECONDARY: None

RESOURCES:

COLLECTION POINT: N/A

ACCESS AREA VIA:

SITE: 07-022 US Navy Amphibious Base

COUNTY: San Diego

USGS QUAD: Point Loma

OSPR MAP NO. 137

LONG. 117° 09' 12" W

LAT. 32° 40' 40" N

SITE DESCRIPTION: Marine Mammal holding pens at the eastern end of the Amphibious Base peninsula.

ACCESS: Entry to the site should not be necessary, as all mammals are maintained by Navy Personnel. Oil that may present a hazard to these animals should be reported to Naval Facility Contacts listed below.

SEASONAL CONCERNS: None

PRIORITY: A - Year round

RESOURCES OF PRIMARY CONCERN: Marine Mammals - Porpoises, Dolphins, and Sea Lions

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone
U.S. Navy Ordian	ce Disposal CWO Gundelfinger	(619) 437-2173
		or 437-2906
U.S. Navy Amphi	bious	(619) 437-3432
Base Security Dut	y Officer	

REMARKS: Animals are kept in holding pens and cannot escape contaminants. The site is a high security zone.

SITE: 07-022 US Navy Amphibious Base Mammal Pens

SITE CHARACTERISTICS: Numerous marine mammal pens.

PROTECTION STRATEGIES

PRIMARY: Place boom around all occupied mammal pens.

RESOURCES: 750' Containment boom.

SECONDARY: Remove marine mammals to unaffected area.

RESOURCES:

COLLECTION POINT: N/A

ACCESS AREA VIA: Naval Amphib. Base.

SITE: 07-023 US Navy Delta Beach
COUNTY: San Diego
USGS QUAD: Point Loma
OSPR MAP NO. 137
LONG. 117° 09' 24" W
LAT. 32° 39' 56" N

SITE DESCRIPTION: U.S. Navy Amphibious Base at Delta Beach, California Least Tern nesting site.

ACCESS: Naval Amphibious Base approval necessary.

SEASONAL CONCERNS: Highly vulnerable during nesting season. Adults may be oiled while feeding, leading to contamination of eggs or young.

PRIORITY: A - During breeding season: March to September

C - During non-breeding season: October to February

RESOURCES OF PRIMARY CONCERN: California Least Tern and Snowy Plover.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone
U.S. Navy Envir	conment Resources Specialist	
	Tim Burr	(619) 532-3745
Amphibious Bas	e Security Office	
	Duty Officer	(619) 437-3432
Amphibious Ras	e Natural Resources Office	
7 Impinotous Dus	Brian Ecalstorn	(619) 437-3846
		` /
	Stephen Barnhill	(619) 437-3840

REMARKS: The site is in a fenced and gated area accessible from Silver Strand Blvd. Contact the Navy Amphibious Base Security for site entry.

SITE: 07-023 US Navy Delta Beach

<u>SITE CHARACTERISTICS:</u> Fine grain sand. Caution must be exercised when working in this area due to Least Terns nesting throughout the area.

PROTECTION STRATEGIES

PRIMARY: Cross bay deflection boom strategy from east end of Amphib Base.

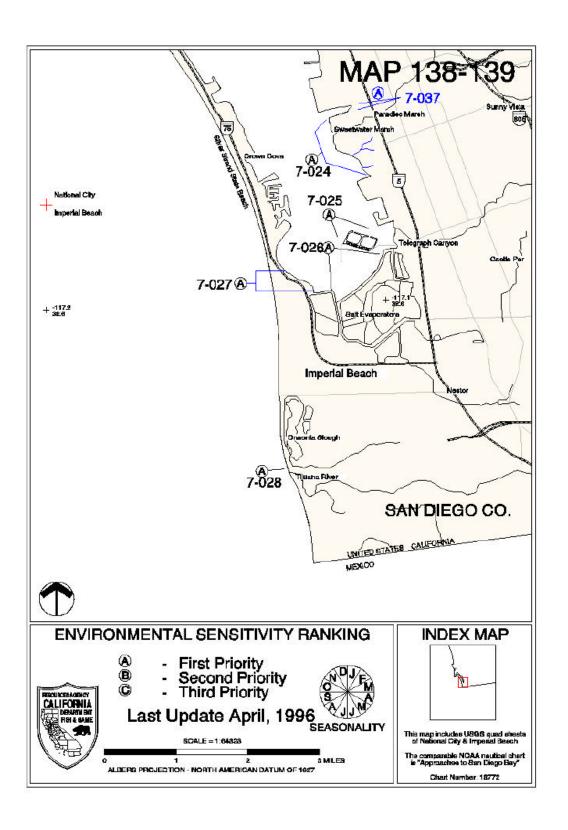
RESOURCES: 2,000' to 7,500' harbor boom, anchor systems, 5 Utility boats.

SECONDARY: N/A

RESOURCES: N/A

COLLECTION POINT: N/A

ACCESS AREA VIA: Naval Amphib. Base/ SILVER STRAND.



SITE: 07-024 Sweetwater Marsh Nat'l Wildlife Refuge
COUNTY: San Diego
USGS QUAD: National City

OSPR MAP NO. 138
LONG. 117° 06' 30" W
LAT. 32° 38' 30" N

SITE DESCRIPTION: Sweetwater Marsh National Wildlife Refuge

ACCESS: Boat access not possible during low tide and is only marginal at high tide. Truck/auto access from D Street Fill or E Street Interpretive Center entry gate.

SEASONAL CONCERNS: Highly vulnerable species of birds, including endangered Light-Footed Clapper Rail roosting and feeding year round; California Brown Pelican resting and feeding year round; California Least Tern, Snowy Plover and Belding's Savannah Sparrow nesting and feeding spring and summer.

PRIORITY: A - Year round

RESOURCES OF PRIMARY CONCERN: Salt marsh, mudflat, and eelgrass used by numerous species of birds and invertebrates. Rare and endangered organisms (2 plants, 5 birds).

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone		
Bayfront Conservatory	Dr. Stephen Neudecker	(619) 422-8100		
	Barbara Moore	(619) 432-2483		
US Fish and Wildlife Service				
	Rebecca Young	(619) 431-9440		
San Diego Port District	Melissa Mailander	(619) 686-6254		
Coastal and Marine Institute				
	Dr. Joy Zedler	(619) 594-5682		
Nat'l Marine Fisheries Service				
	Bob Hoffman	(310) 980-4043		

<u>REMARKS</u>: The site is characterized by extensive mudflat area which will not be approachable on foot. Consequently, any clean-up will be limited to upper intertidal area.

REFERENCES: San Diego Unified Port District Master Plan, Final EIR (1980) South San Diego Bay Enhancement Plan

SITE: 07-024 Sweetwater Marsh Nat. Wildlife Refuge

SITE CHARACTERISTICS: Area is bounded by mud flats which will not support weight. Several small tidal channels punctuate this refuge. Sweetwater River and Paradise Cove are north of the refuge at I-5. F and G streets at the south end of the refuge have tidal channels with culverts. The north end of Sweetwater Marsh Refuge is occupied.

PROTECTION STRATEGIES

PRIMARY: Cross-bay deflection boom strategy.

RESOURCES: 2,000' to 7,500' harbor boom, anchor systems, utility boats

SECONDARY: Sandbag the five small channel entrances, Sweetwater River, and use 2,000' of deflection boom in Sweetwater Channel.

RESOURCES: 10 people, 10 Shovels, 250 Sand bags, Sand and 2,000' boom

COLLECTION POINT:

ACCESS AREA VIA: Reserve's parking lot and walking trails.

STAGING AREA: Staging of sand bags and sand can occur on the Sweetwater Marsh Refuge, but should be coordinated with Refuge personnel to avoid injury to Refuge property and resources.

SITE: 07-025 Chula Vista Wildlife Reserve Island
COUNTY: San Diego
USGS QUAD: Imperial Beach
COUNTY: San Diego
LONG. 117° 07 30" W
LAT. 32° 36′ 30" N

SITE DESCRIPTION: Chula Vista Wildlife Reserve Island is a man-made peninsula at the south end of San Diego Bay. Immediately to the east of the island is located the SDG&E power plant cooling water intake.

ACCESS: Truck/auto via SDG&E general entry gate; boat access possible, although water depths are very shallow at low tide and only shallow draft vessels may approach on high tides.

SEASONAL CONCERNS: Endangered California Least Tern and Snowy Plover nest and feed in this area. Brown Pelican feed and rest here. Green Sea Turtles frequent this site and are often found at the warm water discharge outlet channel for the power plant. Migratory shorebirds and waterfowl present during spring, autumn, and winter.

PRIORITY: A - Year round

RESOURCES OF PRIMARY CONCERN: Numerous species of birds, salt marsh, eelgrass, Green Sea Turtle, California Least Tern, Snowy Plover.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone		
San Diego Port District	Melissa Mailander	(619) 686-6254		
Nat'l Marine Fisheries Service				
	Bob Hoffman	(310) 980-4043		
Coastal and Marine Institute				
	Dr. Joy Zedler	(619) 594-5682		
San Diego Gas and Electric				
	Guard Gate	(619) 420-3066		

REMARKS:

REFERENCES: South San Diego Bay Enhancement Plan (1990)

San Diego Unified Port District Masterplan Final EIR (1980)

SITE: 07-025 Chula Vista Wildlife Res. Island

SITE CHARACTERISTICS: Island with limited access. Least Tern nesting area.

PROTECTION STRATEGIES

PRIMARY: Cross Bay deflection boom strategy.

RESOURCES: 2,000' to 7,500' Boom, Work boats, Utility boats, anchoring systems.

SECONDARY: Deploy boom across entrances or sand bag entrances

RESOURCES: 2 X 100' Cont. boom. Total=200 Feet. 600-800 Sand bags.

COLLECTION POINT: N/A

ACCESS AREA VIA: Road at SDG&E.

SITE: 07-026 South Bay Salt Works and Otay River Channel

COUNTY: San Diego

USGS QUAD: Imperial Beach

OSPR MAP NO. 139 LONG. 117° 07' 30" W LAT. 32° 36' 30" N

SITE DESCRIPTION: Western Salt Works and Otay River Channel represent the southern most Area of San Diego Bay.

ACCESS: Boat access limited due to shallow water at flood tide. Truck access from Silver Strand Blvd. or Western Salt Co. Foot traffic on soft mudflat not advisable.

SEASONAL CONCERNS: California Least Tern nesting March thru September; waterfowl wintering and migration autumn, winter, and spring months; sea birds and shorebirds year round.

PRIORITY: A - Year round

RESOURCES OF PRIMARY CONCERN: The area is highly vulnerable to habitat degradation of Mudflats with adverse effects on sea birds, shorebirds, waterfowl and mudflat invertebrates.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone
City of San Diego	Mike Evans	(619) 546-7172
Western Salt Company	Alan Jones	(619) 423-3388 (nt) 420-2659

REMARKS: The site is characterized by extensive mudflat area which is approachable by foot only to a limited degree. Any clean-up activity will be restricted to upper intertidal area.

REFERENCES: South San Diego Bay Enhancement Plan (1990)

San Diego Unified Port District Masterplan, Final EIR (1980)

SITE: 07-026South Bay Salt Works, Otay River

SITE CHARACTERISTICS: Rip-rap lines this area. Cultural resources are located in this area.

PROTECTION STRATEGIES

PRIMARY: Cross Bay deflection boom strategy.

RESOURCES: 2,000' to 7,500' of harbor boom, Utility boats, anchoring systems.

SECONDARY: Close flood gates. Place boom across River entrance.

RESOURCES: 1 X 200' of cont. boom.

COLLECTION POINT: N/A

ACCESS AREA VIA: Salt works dike road.

 SITE: 07-027 Emory Cove
 OSPR MAP NO. 139

 COUNTY: San Diego
 LONG. 117° 08' 30" W

 USGS QUAD: Imperial Beach
 LAT. 32° 30' 30" N

SITE DESCRIPTION: Emory Cove is situated in the extreme south end of San Diego Bay.

ACCESS: Boat access limited due to shallow water at flood tide. Truck access from Silver Strand Blvd.

SEASONAL CONCERNS: California Least Tern nesting March thru September; waterfowl wintering and migration Autumn, Winter, and Spring months; sea birds and shorebirds year round.

PRIORITY: A - Year round

RESOURCES OF PRIMARY CONCERN: Eelgrass beds, mudflat infauna, marsh inhabitants, sea birds, shorebirds, and waterfowl.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone		
San Diego Port District	Melissa Mailander	(619) 686-6254		
Nat'l Marine Fisheries Service				
	Bob Hoffman	(310) 980-4043		
Coastal and Marine Institute				
	Dr. Joy Zedler	(619) 594-5682		
Western Salt Company	Alan Jones	(619) 566-6600		

REMARKS: The site is characterized by extensive mudflat area which is approachable on foot only to a limited degree. Any clean-up activity will be restricted to upper intertidal area.

REFERENCES: South San Diego Bay Enhancement Plan (1990)

San Diego Unified Port District Masterplan, Final EIR (1980)

SITE: 07-027 Emory Cove

SITE CHARACTERISTICS: Several small tidal inlets punctuate this marsh area.

PROTECTION STRATEGIES

PRIMARY: Cross Bay deflection strategy.

RESOURCES: 2,000' to 7,500' of harbor boom, Utility boats, anchoring systems.

SECONDARY: Sand bag all small entrances.

RESOURCES: 50-100 Sand bags.

COLLECTION POINT: N/A

ACCESS AREA VIA: Silver Strand

STAGING AREA: Staging of sand bags can occur along the north and south ends of Emory Cove where parking area is available adjacent to the highway.

SITE: 07-028 Tijuana River

COUNTY: San Diego

USGS QUAD: Imperial Beach

COUNTY: San Diego

LONG. 117° 07' 46" W

LAT. 32° 33' 24" N

SITE DESCRIPTION: Tijuana River and Tijuana Slough Complex.

<u>ACCESS</u>: For south shore access exit San Diego Freeway (I-5) at Dairy-Mart Road, to Monument Road out to Border Field State Park and coastline. For north shore access exit I-5 at Palm Ave., go west approx. 3 miles to Seacoast Dr, then south to the reserve gate.

SEASONAL CONCERNS: None

PRIORITY: A - Year round

RESOURCES OF PRIMARY CONCERN: Numerous species of birds, including several endangered species on seasonal and year round basis. Endangered species include Light-Footed Clapper Rail, California Least Tern, Snowy Plover, Brown Pelican and Belding's Savannah Sparrow. One endangered plant species in sand dune areas. Marsh vegetation and mudflat invertebrates.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone		
Coastal and Marine Institute				
	Dr. Joy Zedler	(619) 594-5682		
CA Dept of Parks and Recreation				
	Ed Navarro	(619) 237-7667		
U.S. Fish and Wildlife Service				
	Rebecca Taylor	(619) 575-2704		

REMARKS: Heavy equipment may be used to close the mouth of the river by sand berm creation, except during periods of high volume river discharge. However, this is considered a doubtful approach, due to the relatively constant upstream discharge rate. Deflection booms may be a preferred alternative.

The river should be considered a potential health hazard due to routinely high levels of sewage contamination. Consult Dept. of Health Services prior to placing clean-up personnel in contact with river water.

REFERENCES: The Ecology of Tijuana Estuary: An Estuarine Profile (1986)

California Coastal Access Guide (1991)

SITE: 07-028 Tijuana River Mouth

SITE CHARACTERISTICS: Approximately 50' wide, leads to large wildlife preserve. Cultural resources are located in this area. Caution should be exercised to limit the impact to Snowy Plover and Least Tern nesting areas. There is also a dune restoration project in the area. Cleanup crews should be cautioned about potential water quality biohazards from sewage contamination.

PROTECTION STRATEGIES

PRIMARY: Construct sand berm with an underflow dam at entrance

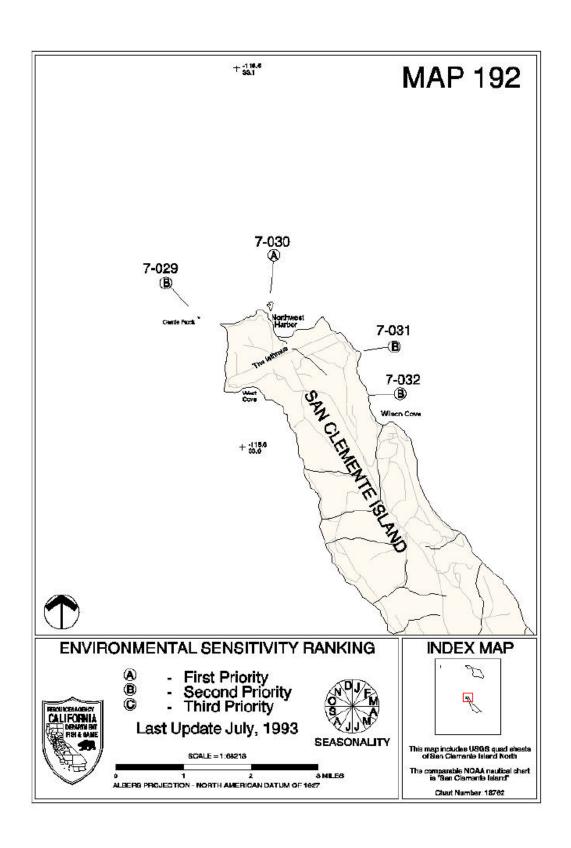
RESOURCES: 1 Bulldozer

SECONDARY: 2 Tier boom system to protect individual channels

RESOURCES: 2 X 250' boom. Total=500'.

COLLECTION POINT: N/A

ACCESS AREA VIA: Borderfield State Park from the south. From the north exit to Palm Ave. From I-5, go west about 3 mile to Seacoast Dr. then south about 1 mile to the Reserve gate. The gate key is available at the Tijuana Estuary Reserve Center located at 300 Caspian Way.



SITE: 07-029 San Clemente Island, Castle Rock
COUNTY: Los Angeles
USGS QUAD: San Clemente Island, North
COUNTY: Los Angeles
LONG. 118° 36' 52" W
LAT. 33° 02' 04" N

SITE DESCRIPTION: San Clemente Island, Castle Rock

ACCESS: U.S. Navy approval needed.

SEASONAL CONCERNS: None

PRIORITY: B - Year round

RESOURCES OF PRIMARY CONCERN: Endangered California Brown Pelicans vulnerable to oiling during feeding.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone		
U.S. Navy Natural Resources Office				
	Jan Larson	(619) 545 1130		
San Clemente Island Security Office				
	Duty Officer	(619) 524 9214		

REMARKS:

REFERENCES: Note the presence of restricted or dangerous areas at various locations around the island. See San Clemente Island navigation chart (#18762).

SITE: 07-029 San Clemente Island, Castle Rock

SITE CHARACTERISTICS: Rocky projection continuously effected by wave action. Brown Pelicans roost/feed in area.

PROTECTION STRATEGIES

PRIMARY: No practical mechanical methods available due to the open coastal exposure and deep water at this site.

RESOURCES:

SECONDARY: Consider dispersants or In-Situ burning to mitigate oil impacts. Applicable only at a substantial distance from the site.

RESOURCES:

COLLECTION POINT: N/A

ACCESS AREA VIA: Boat.

SITE: 07-030 San Clemente Island, Bird Rock
COUNTY: Los Angeles
USGS QUAD: San Clemente Island, North
COUNTY: Los Angeles
LONG. 118° 35' 27" W
LAT. 33° 02' 15" N

SITE DESCRIPTION: San Clemente, Bird Rock

ACCESS: U.S. Navy approval needed

SEASONAL CONCERNS: None

PRIORITY: A - Year Round

RESOURCES OF PRIMARY CONCERN: Year round activity: birds feeding, and nesting; sea lion pups - small numbers; harbor seals haul-out.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone	
U.S. Navy Natural Resources Office Jan Larson (619) 545-1130			
	Jan Larson	(619) 545-1130	
San Clemente Island Security Office			
	Duty Officer	(619) 524-9214	

REMARKS:

REFERENCES: Note the presence of restricted and dangerous areas at various locations around the island. See San Clemente Island navigation chart (#18762)

SITE: 07-030 San Clemente Island, Bird Rock

SITE CHARACTERISTICS: Small island north of San Clemente Island. Bird/Sea mammals in this area.

PROTECTION STRATEGIES

PRIMARY: No practical mechanical protection methods available due to the open coastal exposure of the site

RESOURCES:

SECONDARY: Consider use of dispersants or In-Situ burning to mitigate oil impacts to the coastline. Applicable only at substantial distance from shore.

RESOURCES:

COLLECTION POINT: N/A

ACCESS AREA VIA: BOAT.

OSPR MAP NO. 192 **LONG.** 118° 33' 12" W

SITE: 07-031 San Clemente Island; Wilson Cove, N. Pt

COUNTY: Los Angeles

USGS QUAD: San Clemente Island, North

LAT. 33° 01' 30" N

SITE DESCRIPTION: San Clemente Island, north point of Wilson Cove

ACCESS: U.S. Navy approval needed

SEASONAL CONCERNS: Adult birds vulnerable during feeding; eggs and chicks vulnerable to oiled parents and tainted food.

PRIORITY: B - Year round

RESOURCES OF PRIMARY CONCERN: Cormorants: feeding, nesting.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone		
USN Natural Resources Office				
	Jan Larson	(619) 545-1130		
San Clemente Island Security Office				
	Duty Officer	(619) 524-9214		

REMARKS:

REFERENCES: Note the presence of restricted and dangerous areas at various locations around the island. See San Clemente Island navigation chart (#18762).

SITE: 07-031 San Clemente Island, Wilson Cove N. Pt.

SITE CHARACTERISTICS: Rocky point/cliff area. Bird nesting area.

PROTECTION STRATEGIES

PRIMARY: No practical mechanical protection methods available due to the open coastal exposure of the site.

RESOURCES:

SECONDARY: Condier use of dispersants or In-Situ burning to mitigate oil impacts to the coastline. Applicable only at substantial distance from shore.

RESOURCES:

COLLECTION POINT: N/A

ACCESS AREA VIA: Boat or San Clemente Island.

SITE: 07-032 San Clemente, Wilson Cove
COUNTY: Los Angeles
USGS QUAD: San Clemente Island, North
COUNTY: Los Angeles
LONG. 118° 33' 40" W
LAT. 33° 00' 45" N

SITE DESCRIPTION: San Clemente Island at central point of Wilson Cove

ACCESS: U.S. Navy approval necessary

SEASONAL CONCERNS: Adults vulnerable during feeding; eggs and chicks vulnerable to oiled parents and/or tainted food.

PRIORITY: B - Year round

RESOURCES OF PRIMARY CONCERN: Cormorants - several species; small numbers.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone		
USN Natural Resources Office				
	Jan Larson	(619) 545-1130		
San Clemente Island Security Office				
	Duty Officer	(619) 524-9214		

REMARKS:

REFERENCES: Note the presence of restricted and dangerous areas at various locations around the island. See San Clemente Island navigation chart (#18762).

SITE: 07-032 San Clemente Island, Wilson Cove

<u>SITE CHARACTERISTICS:</u> Large cove. Security Zone (33 CFR 165.1111) established in this area. Numerous sensitive/expensive cables underwater. No anchoring allowed in this area.

PROTECTION STRATEGIES

PRIMARY: No mechanical protection strategy practical due to open coastal exposure of the site.

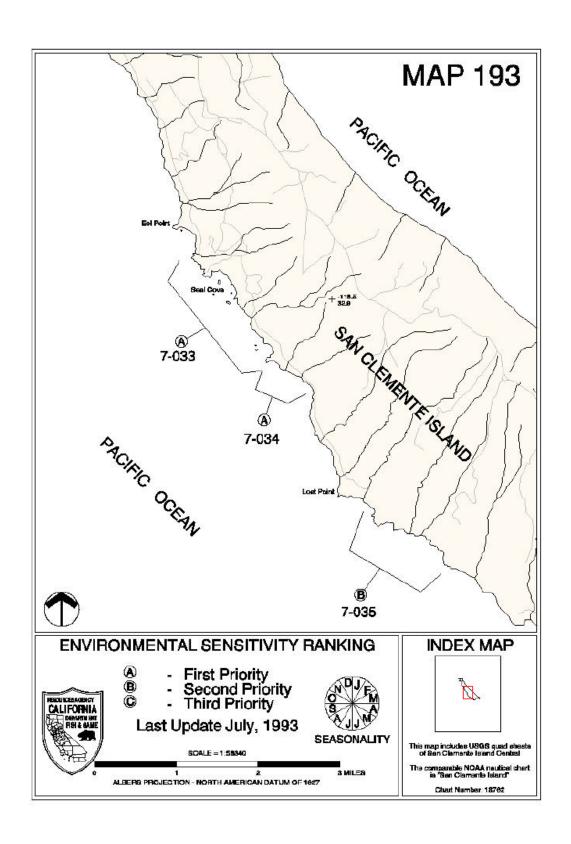
RESOURCES:

SECONDARY: Consider use of dispersant or In-Situ burning to mitigate oil impacts to the coastline. Applicable only at substantial distance from shore.

RESOURCES:

COLLECTION POINT: N/A

ACCESS AREA VIA: San Clemente Island.



SITE: 07-033 San Clemente Island, Seal Cove to Mail Pt.

COUNTY: Los Angeles

USGS QUAD: San Clemente Island, Central

OSPR MAP NO. 193

LONG. 118° 32' 14" to

118° 31' 16"

LAT. 32° 54′ 22″ to

32° 53'

SITE DESCRIPTION: San Clemente Island between Seal Cove southeast to Mail Pt. (1.75)

miles)

ACCESS: U.S. Navy approval needed

SEASONAL CONCERNS: None

PRIORITY: A - Year round

RESOURCES OF PRIMARY CONCERN: California sea lions, elephant seals, harbor seals, western gulls, brown pelicans, cormorants (several species).

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone		
U.S. Navy Natural Resources Office				
	Jan Larson	(619) 545-1130		
San Clemente Island Security Office				
	Duty Officer	(619) 524-9214		

REMARKS:

REFERENCES: Note the presence of restricted and dangerous areas at various locations around the island. See San Clemente Island navigation chart (#18762).

SITE: 07-033 S. C. I. Seal Cove to Mail

<u>SITE CHARACTERISTICS:</u> West side San Clemente Island. Birds/mammals in great quantities use this area.

PROTECTION STRATEGIES

PRIMARY: No conventional protections strategy practical due to open coastal exposure of the site.

RESOURCES:

SECONDARY: Consider use of dispersants or In-Situ Burning to mitigate oil impacts to the coastline. Applicable only at substantial distance from shore.

RESOURCES:

COLLECTION POINT: N/A

ACCESS AREA VIA: San Clemente Island.

SITE: 07-034 San Clemente Island, Mail Pt. To SE 1 NM

COUNTY: Los Angles

USGS QUAD: San Clemente Island, Central

OSPR MAP NO. 193

LONG. 118° 31' 16" to

118° 30' 25" W

LAT. $32^{\circ} 53' 05'' to$

SITE DESCRIPTION: San Clemente Island from Mail Point to the southeast a distance of about 1 NM

ACCESS: U.S. Navy approval needed

SEASONAL CONCERNS: California sea lions pupping May - Oct; elephant seals pupping Dec - April; harbor seals haul-out year round; California Brown Pelicans roosting and feeding year round; cormorants roosting, feeding (year round) and nesting (spring to early summer); western gulls roosting, feeding (year round) and nesting (summer).

PRIORITY: A - Year round

RESOURCES OF PRIMARY CONCERN: Pups of mammals and chicks of birds vulnerable to tainted food or contaminated habitat. Adult California Brown Pelicans and cormorants highly susceptible to oiling during feeding activity. Eggs of birds vulnerable to contamination by adults.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone		
USN Natural Resources Office				
	Jan Larson	(619) 545-1130		
Nat'l Marine Fisheries Service				
	Chuck Oliver	(619) 546-7172		
San Clemente Island Security Office				
	Duty Officer	(619) 524-9214		

REMARKS:

REFERENCES: Note the presence of restricted and dangerous areas at various locations around the island. See San Clemente Island navigation chart (#18762).

SITE: 07-034 S. C. I., Mail Pt. To SE 1 Mile

<u>SITE CHARACTERISTICS:</u> West side San Clemente Island. Birds/mammals in great quantities use this area.

PROTECTION STRATEGIES

PRIMARY: No conventional protection strategy practical due to open coastal exposure of the site.

RESOURCES:

SECONDARY: Consider the use of dispersants or In-Situ burning to mitigate oil impacts to the coastline. Applicable only at substantial distance from shore.

RESOURCES:

COLLECTION POINT: N/A

ACCESS AREA VIA: San Clemente Island.

SITE: 07-035 San Clemente Isl, 0.8-1.9 NM SE of Lost Point

COUNTY: Los Angeles

USGS QUAD: San Clemente Island, south

OSPR MAP NO. 194 **LONG.** 118° 29' 20" to

118° 28' 12" W

LAT. 32° 50′ 40″ to 32° 50′ 08″ N

SITE DESCRIPTION: San Clemente Island along the coastline between 0.8 and 1.9 NM southeast of Lost Point.

ACCESS: US Navy approval needed

SEASONAL CONCERNS: None

PRIORITY: B - Year round

RESOURCES OF PRIMARY CONCERN: Harbor seal feeding and haul-out sites

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone		
U.S. Navy Natural Resources Office				
	Jan Larson	(619) 545-1130		
Nat'l Marine Fisheries Service				
	Chuck Oliver	(619) 546-7172		
San Clemente Island Security Office				
	Duty Officer	(619) 524-9214		

REMARKS: Located inside designated "danger area".

REFERENCES: Note the presence of restricted or dangerous areas at various locations around the island. See San Clemente Island navigation chart (#18762).

SITE: 07-035 S. C. I., 0.8-1.9 NM SE OF Lost Pt.

<u>SITE CHARACTERISTICS:</u> West side of San Clemente Island. Birds/mammals in great quantities use this area.

PROTECTION STRATEGIES

PRIMARY: No conventional protection strategy practical to open coastal exposure of the site.

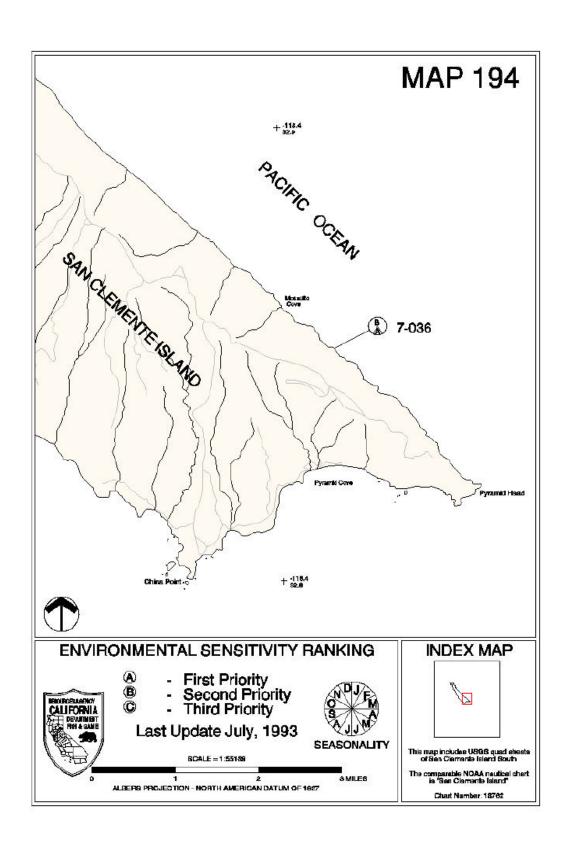
RESOURCES:

SECONDARY: Consider use of dispersants or In-Situ burning to mitigate oil impacts to coastline. Applicable only at substantial distance from shore.

RESOURCES:

COLLECTION POINT: N/A

ACCESS AREA VIA: San Clemente Island.



SITE: 07-036 San Clemente Island, 0.9 NM SE of Mosquito Cove OSPR MAP NO. 194
COUNTY: Los Angeles
USGS QUAD: San Clemente Island, South
LAT. 32° 51' 03" N

SITE DESCRIPTION: San Clemente Island at a point 0.9 NM Southeast of Mosquito Cove

ACCESS: U.S. Navy approval needed

SEASONAL CONCERNS: Roosting, feeding and nesting.

PRIORITY: A - During breeding season May - July

B - During non-breeding season August - April

RESOURCES OF PRIMARY CONCERN: Cormorants - several species: heavy usage with breeding and roosting; adults vulnerable during feeding; chicks vulnerable to oiled parents and tainted food.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone	
USN Natural Resources Office			
	Jan Larson	(619) 545-1130	
San Clemente Island Security Office			
	Duty Officer	(619) 524-9214	

REMARKS:

REFERENCES: Note the presence of restricted or dangerous areas at various locations around the island. See San Clemente Island navigation chart (#18762).

SITE: 07-036 San Clemente Island, 0.9 NM SE of Mosquito Cove

<u>SITE CHARACTERISTICS:</u> West side San Clemente Island. Birds/mammals in great quantities use this area.

PROTECTION STRATEGIES

PRIMARY: No conventional protection strategy practical to open coastal exposure of the site.

RESOURCES:

SECONDARY: Consider use of dispersants or In-Situ burning to mitigate oil impacts to coastline. Applicable only at substantial distance from shore.

RESOURCES:

COLLECTION POINT: N/A

ACCESS AREA VIA: San Clemente Island.

SITE: 07-037 Paradise Marsh

COUNTY: San Diego

USGS QUAD: Imperial Beach

OSPR MAP NO. 194

LONG. 117° 06' 30" W

LAT. 32° 39' 00" N

SITE DESCRIPTION: Paradise Marsh is a small marsh habitat situated immediately west of interstate highway 5 at the Sweetwater River. The marsh is connected to the river by two tidal flood channels, one to the north and one to the south.

ACCESS: Enter by land from 32nd St. exit I-5 at 24th St. National City. Turn left onto Tideland Ave then left at 32nd St US Fish and Wildlife Maintain the entry gate key.

SEASONAL CONCERNS: Feeding Least Terns and Snowy Plover during spring and summer. Nesting Belding Savannah Sparrows nesting during spring and summer

PRIORITY: A - Year round

RESOURCES OF PRIMARY CONCERN: Marsh habitat with associate bird, fish, and wildlife. Beldings Savannah Sparrows, Saltmarsh birds beak.

TRUSTEE AGENCY/LOCAL EXPERTS:

Agency	Name	Phone
US Fish and Wild	life Service	_
	Rebecca Young	(619) 572-2704
		(619) 930-0168

REMARKS:

REFERENCES:

SITE: 07-037 Paradise Marsh

SITE CHARACTERISTICS: An intermittently flooded wetland comprised of several branching tidal channels inter-connected to Sweetwater Marsh National Wildlife Refuge.

PROTECTION STRATEGIES

PRIMARY: Cross Bay deflection boom strategy

RESOURCES: 2,000' to 7,500' harbor boom, anchor systems, and utility boats.

SECONDARY: South corner of 24th St terminal deflection boom Sweetwater flood channel deflection boom

RESOURCES: 3,000' harbor boom and anchor systems.

COLLECTION POINT: N/A

ACCESS AREA VIA: Sweetwater flood channel at Pepper Park boat launch.

STAGING AREA: Pepper Park boat launch parking lot at the terminal end of Tidelands Ave., National City.

TAB B - ECONOMICALLY SENSITIVE AREAS

The primary purpose of Tabs A through C is to identify and incorporate into emergency response planning, the specific resources subject to injury or damages from an oil sill event. Tab B contains information that identifies through lists, tables maps, and text, many of the economic resources that face potential damages due to an oil spill. Limitations of time, personnel, and the availability of information suggests that all resources of significant economic value and susceptible to marine oil spills, could not be identified at this time.

People involved with response planning recognize that throughout California marine waters, along the State's shoreline, and within coastal communities there are may resources of economic importance that could be severely impacted by an oil spill incident.

Relation to Environmentally Sensitive Areas in Tab A

Tab A contains maps and site summary sheets with information about the environmental sensitivity of specific locations within the planning area. State and Federal law establish three priority levels for dedication of emergency oil spill response resources.

First Priority - Protection of human health and safety Second Priority - Protection of environmental resources Third Priority - Protection of economic resources

Examples of resources that will receive a first priority response (human health and safety) includes:

- power plant intake desalinization plants
- drinking water intakes other health/safety intakes
- public use areas at risk (e.g. fire department)
 (e.g. hazardous fumes)

Environmentally sensitive sites are designated as the second priority for oil spill response resources. Environmental sites are categorized in Tab A using a scale of A, B, and C. Sites ranked with an A are the most sensitive to an oil spill.

Economically Sensitive Areas

Strictly economic resources are designated as the third priority for dedication of oil spill response resources, following human health and safety and environmental resources. The economic sites are ranked using a continuation of the environmental scale with D, E, and F categories. Economic resources that have a greater potential for long-term damages receive a higher rank or priority for emergency response.

Response planners recognize that marine resources can have environmental, economic, and cultural or historical importance, such as coastal parks or important fishing areas. In these cases, the higher environmental ranking would be used for response planning. The need to set priorities for protection will occur only when response equipment or resources are inadequate to handle a given spill volume.

The Area Contingency Plan is a planning document intended to assist oil spill response personnel during actual response activities and with pre-spill planning. The Unified Command requires flexibility in planning response activities. This flexibility is necessary to provide the most appropriate response to a given spill event.

Criteria for Priority Response and Types of Economic Resources

The following criteria or definitions are used to categorize economic resources in terms of priority for response:

- D = Economic activities and resources which require high water quality for their operations or existence. Resources that fall into this category would face severe, long-term economic impacts from a spill. This category includes commercial fishing areas (also have environmental rank), aquaculture and mariculture areas, marine labs, salt pond intakes, aquarium water intakes, etc.
- E = Facilities, businesses, or resources which directly use coastal or bay waters within their economic activity and which are at risk of oiling from a spill in marine waters. The resources falling into this category would face significant disruption of their activity, but shorter term potential damages from oiling than resources in the "D" category. This category would include resources such as marinas, harbors, commercial piers, industrial intakes, and parks or recreational areas.
- F = This category contains marine associated facilities, businesses and resources. These resources would face economic impacts from a marine spill, but do not depend directly on marine water for their economic base. Resources in this category will tend to face less severe damages than those identified in categories D or E. This category includes economic resources such as waterfront hotels, restaurants, shops, and residential areas. (Note: residential sites would be evacuated to avoid health risks).

Types of Economically Significant Resources and Ranking

Listed below are various types of significant economic resources potentially at risk from oiling and the appropriate response priority category.

- aquaculture, mariculture (D)

- aquariums, marine labs (D)
- facility intakes [not affecting public health] (D)
- parks, beaches, recreational areas (E)
- vessel or boat traffic areas: shipping lanes, harbor entrances, river mouths, bays, anchorages (E)
- marinas, houseboat areas (E)
- ferries and tour boats (E)
- port or harbor facilities (E)
- boat moorings, cargo piers, terminals, fishing piers (E)
- ship or boat repair shops (E)
- tourist, hotel, restaurant areas (F)
- waterfront residential areas (F)

Information About Sensitive Economic Resources

Tab B contains lists, and/or maps of sensitive economic areas or resources. Below is a description of the types of information that can be provided for each identified economic resource or facility. Some information is unavailable for specific resources identified within this section.

- 1. Resource or facility identification number
- 2. Geographic location of resource or facility
- 3. Brief description of the resource at risk
- 4. Contact names and numbers (24 hour access if available)
- 5. Priority response ranking

WATER INTAKE FACILITIES

This section lists area water intake information including: firm name, address, phone number, size of intake, and area served.

INTAKE OPERATOR	SIZE	USE	AREA SERVED	RANKING
07-101 Kelco 2145 E. Belt St. San Diego, CA 92113 (619) 231-4891 or (619) 232-0604	<100 GPM	Washing floors	Kelco	D
07-102 U.S. Naval Station Public Works Center Harbor Dr. at 32nd St. San Diego, CA 92113 Duty Desk: (619) 556-7341 (619) 556-7349	Variety of intakes both permanent and portable	Serves the salt water system on base		D
07-103 NASSCO Harbor Dr. at 28th St. San Diego, CA 92113 (619) 544-8401	2-36" pipes 2-24" pipes 6-24" pipes	Flooding the drydock area	Building Dock Floating Dock	D
07-104 Sea World-Mission Bay 1720 S. Shores Rd. San Diego, CA 92109 (619) 222-6363 (619) 226-3800 (night) Attn: Security	5,500 GPM	Water for marine life tanks	Sea World Park	D
07-105 Scripps Institute 8602 La Jolla Shores Dr. La Jolla, CA 92073 Attn: Trouble Deck (619) 534-2930 or 534-3851 Attn: Ron van Voxtel (619) 534-7962 (day) or (619) 753-2197 (night)	900 GPM	For aquariums and some experimental work with marine life	Scripps	D
07-106 Hubbs-Sea World White Sea bass Fish Hatchery Agua Heionda Lagoon Carlsbad, CA 92008 (619) 434-9501 Attn: Hatchery Mgnr.	2-12" pipes @ 12' depth 600 to 12000 GPM	Live fish maintenance	Hatchery holding tanks	D
07-107 San Diego Gas & Electric Station B Power Plant South side of B St. Pier San Diego, CA 92101 (619) 234-5469 Attn: Duty Engineer	123,910 GPM	Cooling	All plants feed energy into a grid that serves the entire metro area	D

WATER INTAKE FACILITIES (Continued)

INTAKE OPERATOR	SIZE	USE	AREA SERVED	RANKING
07-108 San Diego Gas & Electric Encina Power Plant Agua Hedionda Lagoon San Diego, CA 92008 (619) 931-7232 Attn: Duty Engineer	595,200 GPM	Cooling	All plants feed energy into a grid that serves the entire metro area	D
07-109 So. California Edison San Onofre Power Plant Units 1, 2, and 3 Oceanside, CA 92054 (619) 492-7700/27 Attn: Duty Engineer	2,270,000 GPM	Cooling	Energy is fed into two grids; 24% to S.D. grid 76% to the SoCal Edison grid	D
07-110 San Diego Gas & Electric Silvergate Power Plant 1348 Sampson St. San Diego, CA 92113 (619) 420-7383 This plant is NON-OPERATING	154,300 GPM	Cooling	All plants feed energy into a grid that serves the entire metro area	D
07-111 San Diego Gas & Electric South Bay Power Plant 900 Bay Blvd. Chula Vista, CA 92011 (619) 420-7383 Attn: Duty Engineer	417,400 GPM	Cooling	All plants feed energy into a grid that serves the entire metro area	D
07-112 Western Salt Co. 1470 Bay Blvd. Chula Vista, CA 92011 (619) 423-3388 or (619) 566-6600	Tide gate west of Otay Channel controlled by water pressure with tidal action	Extract salt for commercial use		D

REGISTERED MARINE AQUACULTURE FACILITIES

This section lists areas operated for the purpose of commercial production of biological resources.

LEASEE	No. ACRES	GROWING AREA	PRODUCTS RA	NKING
07-113 JON C VAN OLST AQUATIC SYSTEMS, INC. 11125 Flinkote Ave. Suite J San Diego CA 92121 (619) 452-5765	0.0	Agua Hedionda Lagoon	Mussels	D
07-114 DAVID LAPOTE 6678 Hemingway Dr. San Diego, CA 92109 NO LISTING	1.0	Mission Bay Quivera Basin R & D	Red & Green Abalone and Quahog clams	D
07-115 DON GILBERT MARITECH P.O. Box 90190 San Diego, CA 92109 (619) 226-3448	0.0	San Diego Bay R & D	Abalone	D
07-116 HUBBS-SEA WORL White Seabass Fish Hatchery Agua Hedionda Lagoon Carlsbad, CA 92008 (619) 434-9501	LD 0.0	Agua Hedionda lagoon	White sea bass	D

COMMERCIAL FACILITIES/DRYDOCK FACILITIES

Listed below are waterfront terminals and drydock facilities in the San Diego area of responsibility.

Waterfront Terminals

07-120 10th Avenue Marine Terminal.

A 96-acre facility situated along the Coronado Bay Bridge. It is the center of commercial shipping activity and contains many bulk-handling (e.g. soda ash, potash, palm oil, cement, etc.) operations of the Port, including a bulk silo complex and a traveling bulkloader for grains and chemicals and other dry bulk products. A new Cold Storage Facility was opened in February 1993 and is expected to increase vessel traffic to the terminal.

Economic Ranking: E

07-121 National City Marine Terminal.

A 125-acre complex located at the foot of 24th Street. The principal inbound cargoes are lumber, automobiles, minerals, and fuel oil. This terminal also contains a container handling facility with a high-speed, all-electric container crane capable of handling '0-foot and 40-foot units, or single hook lifts of 40 long tons

Economic Ranking: E

07-122 B-Street Pier/Broadway Pier.

Cruise Ship Terminal located between the foot of Broadway and A Street.

Economic Ranking: E

Drydock Facilities

07-123 National Steel and Shipbuilding Co. (NASSCO)

28th St. and N. Harbor Dr. San Diego, CA (619) 544-8401 *Economic Ranking: E*

07-124 Campbell Industries

8th St. and N. Harbor Dr. San Diego, CA (619) 233-7115

Economic Ranking: E

Drydock Facilities (Continued)

07-125 Knight & Carver

1500 Quivira Way

Mission Bay, CA

(619) 222-6488

Economic Ranking: E

07-126 South Bay Boat Yard

G St. Chula Vista

San Diego, CA

(619) 427-6767

Economic Ranking: E

07-127 Driscoll Boat Works, Inc.

2500 Shelter Island Dr.

San Diego, CA

(619) 226-2500

Economic Ranking: E

07-128 Continental Maritime

Bay Front St.

San Diego, CA

(619) 234-8851

Economic Ranking: E

07-129 Southwest Marine Inc.

2205 E. Belt

San Diego, CA

(619) 238-1000

Economic Ranking: E

07-130 Neilsen Beaumont

2420 ShelterIsland Dr.

San Diego, CA

(619) 222-4255

Economic Ranking: E

07-131 Shelter Island Boatyard

2330 Shelter Island Dr.

San Diego, CA

(619) 222-0455

Economic Ranking: E

MARINAS AND MOORING AREAS

The following is a list of names, available number of slips, and contact number (in most cases the dockmaster) for marinas within San Diego's area of responsibility. Also included in this section are local commercial marinas. The approximate number of commercial vessels located in these areas are also listed (numbers will fluctuate depending on the time of year).

MARINA	TOTAL SLIPS	CONTACT #	RANKING		
<u>Oceanside</u>					
07-132 Oceanside Harbor	900	(619) 966-4580	E		
Mission Bay					
07-133 Dana Inn and Marina		(619) 222-6440	E		
07-134 Dana Landing	180	(619) 224-2513	E		
07-135 Marina Village Marin	a 634	(619) 224-3125	E		
07-136 Mission Bay Marina	238	(619) 223-5191	Е		
07-137 Sea World Marina at	Perez Cove				
	210	(619) 226-3915	E		
a					
Shelter Island Area					
07-138 Shelter Island Marina		(619) 223-0301	Е		
07-139 Bay Club Marina	154	(619) 224-3401	E		
07-140 Kona Kai Club	264	(619) 222-1191	E		
07-141 Kona Marina	252	(619) 224-7547	E		
07-142 Shelter Cove Marina	151	(619) 224-2471	Е		
07-143 Half Moon Anchorag	e 80	(619) 224-3401	E		
07-144 Sun Harbor Marina	121	(619) 222-1167	E		
07-145 Gold Coast Marina/Fraisers Yachts					
	35	(619) 225-0588	Е		
07-146 San Diego Yacht Clu	b 600	(619) 221-8400	Е		
07-147 Harbor Police Transic		, ,			
	31	(619) 291-3900	Е		
07-148 Silver Gate Yacht Clu	ıb 144	(619) 222-1214	Е		
07-149 Southwestern Yacht		(619) 222-0438	E		
07-150 Shelter Island Yachtways, Ltd.					
o, 100 Sheller Island Tueller	50	(619) 222-0481	E		
07-151 Crows Nest Brokerag		(619) 222-1122	E		
07-151 Clows Nest Blokelage 20 (019) 222-1122 E					
o, 132 ban Diego Omi. I t. L	44	(619) 686-6227	E		

MARINA	TOTAL SLIPS	CONTACT #	RANKING
Commercial Basin Area			
07-153 Driscoll's Custom Boats	125		E
07-154 Koehler Kraft Co.	20		E
07-155 Nielsen Beaumont	20		E
07-156 Shelter Cove Manna	151		E
07-157 Shelter Island Boat Yard	50		E
07-158 Sun Harbor Marina	150		E
07-159 Endurance Marine/Eichenlaub	's 3	E	
Harbor Island Area			
07-160 Sunroad Resort Marina	609	(619) 574-0736	E
07-161 Cabrillo Isle Marina	420	(619) 297-6222	E
07-162 Marina Cortez	522	(619) 291-5985	E
07-163 Harbor Island West Marina	620	(619) 291-6440	E
07-164 Sheraton Marina	42	(619) 692-2249	E
07-165 Marine Corps Recruit Depot			
Boathouse Marina	50		E
07-166 Naval Training Center Marina	70		E
07-167 Convair Sailing Club	12		E
Embarcadero Area			
07-168 Marriott Marina	447	(619) 230-8955	Е
07-169 San Diego Unified Port		, ,	
District Moorings/Laurel St. A-3	154	(619) 686-6227	E
Coronado			
07-170 Glorietta Bay Marina	109	(619) 435-5203	E
07-171 Loews Hotel & Marina	80	(619) 575-7245	E
07-172 San Diego Unified Port		,	
District Moorings,A-4	170	(619) 686-6340	E
07-173 Coronado Yacht Club	261	, ,	E
07-174 Coronado Cays Yacht Club	8		Е
07-175 Coronado Cays Marina	56		E
Chula Vista	1 550	(610) 024 4216	Г
07-176 Chula Vista Marina & RV Par		(619) 234-4316	E
07-177 California Yacht Marina	342	(619) 422-2595	E
07-178 South Bay Boat Yard	37		E
Commercial Fishing Marinas	- · · · ·		
07-179 Fisherman's Landing	21 slips	(619) 222-0391	
	20 comm. ve	ssels	Е

MARINA 07-180 H & M Landing	TOTAL SLIPS 31 slips	CONTACT # (619) 222-1144	RANKING
or 100 II & III Lunding	25 comm. vessels	(017) 222 1111	E
07-181 Pt. Loma Sportfishing	27 slips (619) 223-162 25 comm. vessels	7	E
07-182 Islandia Sportfishing	250 slips 3 comm. vessels	(619) 222-1164	E
07-183 Seaforth Marina	250 slips 10 comm. vessels	(619) 224-6807	E
07-184 Helgren's Sportfishing	30 slips (619) 722-213 12 comm. vessels	3	E
07-185 Harbor Excursion Docks	6 slips 5 comm. vessels	(619) 234-4111	E
07-186 Tuna Boat Basin	125 slips 72 comm. vessels	(619) 686-6340	E
07-187 S.D. Fisherman's Village	128 slips 37 comm. vessels	(619) 222-4930	E

COASTAL RECREATION AREAS

This section lists beaches, parks, and piers located along the coast from San Mateo Point to the Mexican Border. For area beach and park contacts not listed, contact the San Diego City Parks & Recreation Department (city parks and beaches) at (619) 237-7411/436-3536, CA Dept. of Parks & Recreation (state parks and beaches) at (619) 729-0345 or the San Diego Lifeguard Services Division-at (619) 221-8899 or (619) 221-8800 (after hours).

07-188 San Onofre State Beach.

Wide, sandy beach below sandstone bluffs. Located north and south of the San Onofre Nuclear Generating Station, the state beach includes several well-known surfing spots (714) 492-0802. *Economic Ranking: E.*

07-189 Camp Pendleton Beach Access.

Restricted access beach popular for surf fishing and camping (619) 725-3360.

Economic Ranking: E.

07-190 Harbor Beach.

Wide, sandy beach with surf and rock fishing (619) 966-4580.

Economic Ranking: E.

07-191 Oceanside City Beach.

Popular beach for swimming, surfing, and surf fishing (619) 966-4580.

Economic Ranking: E

07-192 Oceanside Pier.

1,942 foot-long municipal pier with bait and tackle shops, restaurant, and lifeguard station (619) 966-4580.

Economic Ranking: E

07-193 Linear Park.

Landscaped concrete walkway along the bluff top with benches and view platforms.

Economic Ranking: E

07-194 Buccaneer Park.

Picnic area with outdoor showers, playground, baseball diamond, volleyball court, and concession stand.

Economic Ranking: E

07-195 South Oceanside Beach.

Popular Beach for swimming, surfing, and surf fishing (619) 466-4580.

Economic Ranking: E

07-196 Carlsbad City Beach.

Popular beach for swimming, surfing, and surf fishing.

Economic Ranking: E

07-197 Carlsbad State Beach.

Sandy and rocky beach backed by bluffs, with benches, picnic tables, and grassy areas. Popular beach for swimming, surfing, diving, and rock and surf fishing (619) 438-5143.

Economic Ranking: E

07-198 Agua Hedionda Lagoon.

Calm water within the lagoon makes it a popular swimming, fishing, and water-skiing spot (619) 434-3089.

Economic Ranking: E

07-199 South Carlsbad State Beach.

Campsite located along the bluffs. Beach is noted for swimming, surfing, surf fishing, and diving (619) 438-3143.

Economic Ranking: E

07-200 Beacon's Beach.

Formerly known as Leucadia State Beach, a sandy, bluff-backed beach. Popular surfing, swimming, surf fishing, and skin diving area.

Economic Ranking: E.

07-201 Encinitas Beach.

Narrow, sandy beach popular for swimming and surf fishing.

Economic Ranking: E.

07-202 Stone Steps Beach.

A long, partially stone stairway leads to a very narrow cobble beach used for swimming, surfing, and surf fishing.

Economic Ranking: E.

07-203 Moonlight Beach.

A sandy beach popular for surfing, swimming, and surf fishing.

Economic Ranking: E.

07-204 Swami's.

Narrow, sand/gravel beach that is known for excellent surfing. Surf fishing, scuba diving, and swimming are also popular (619) 944-3380.

Economic Ranking: E

07-205 San Elijo State Beach.

Cobble beach popular for surf fishing, swimming, skin diving, and surfing (619) 753-5091.

Economic Ranking: E

07-206 Cardiff State Beach.

Sandy beach popular for surfing, swimming, and surf fishing. North end of beach is a landing and launch zone for carry-on and soft bottom boats (619) 753-5091.

Economic Ranking: E

07-207 Tide Beach Park.

Sandy beach popular for surfing, skin diving, swimming, and surf fishing.

Economic Ranking: E

07-208 Fletcher Cove Park.

Sandy beach popular for diving, swimming, surfing, surf fishing, and catching grunion. Park facilities include: basketball, shuffleboard courts, sand volleyball courts, and picnic tables (619) 755-2971.

Economic Ranking: E

07-209 Stairway to Beach (Seascape Surf).

Wooden stairway leading to a sandy beach popular for surfing, skin diving, surf fishing, swimming, and grunion.

Economic Ranking: E

07-210 Stairway to Beach (Del Mar Shores Terrace).

Stairway leading to a sandy beach popular for surf fishing, catching grunion, swimming, and surfing.

Economic Ranking: E

07-211 Del Mar Bluffs City Park.

Sandy Beach at the mouth of San Dieguito River popular for swimming and surf fishing.

Economic Ranking: E

07-212 Del Mar City Beach.

Wide, sandy beach; good swimming and surfing. Other activities include catching grunion and surf fishing.

Economic Ranking: E

07-213 Seagrove Park.

Grassy area with paved path and benches on the bluffs overlooking the ocean.

Economic-Ranking: E

07-214 Torrey Pines State Beach.

Wide, sandy beach backed by steep sand stone bluffs. Popular activities include picnicking, swimming, surfing, surf fishing, clamming, and skin diving (619) 452-8732.

Economic Ranking: E

07-215 Torrey Pines City Park

Park located on sandstone bluffs overlooking the ocean.

Economic Ranking: E

07-216 Torrey Pines City Beach (Black's Beach).

Popular sandy beach backed by hazardous bluffs. Beach is noted for good swimming and surf fishing.

07-217 La Jolla Shores Beach/Kellogg Park.

Wide, sandy beach with good swimming, surfing, surf fishing, and skin diving. Kellogg Park, east of the beach promenade, has grassy areas, picnic tables, and fire pits.

Economic Ranking: E

07-218 **La Jolla Cove.** Small cove with a sandy beach; very popular for diving, swimming, and surf fishing.

Economic Ranking: E

07-219 Ellen Scripps Park.

A grassy picnic area on the blufftop includes picnic tables, firepits, and shuffleboard courts. Path and stairs lead down to Boomer Beach, popular for body surfing.

Economic Ranking: E

07-220 Children's Pool Beach.

Stairs lead to a sandy beach and to a paved path along the breakwater. Popular swimming and surf fishing spot.

Economic Ranking: E

07-221 Coast Boulevard Park.

Shoreline park with benches and picnic tables; paths along Coast Blvd. lead to a sandy beach and rocky shore.

Economic Ranking: E

07-222 Nicholson Point Park.

Stairway leading to a sandy beach noted for swimming, diving, fishing, and body surfing.

Economic Ranking: E

07-223 Marine Street Beach.

Sandy beach popular for swimming, surfing, skin diving, and surf fishing. Horseshoe Reef, a popular surfing spot, is just north of Marine St.

Economic Ranking: E

07-224 Windansea Beach.

One of the most popular surfing spots on the coast; swimming is also popular.

Economic Ranking: E

07-225 La Jolla Strand Park.

Seasonally sandy beach noted for swimming and surfing.

07-226 Hermosa Terrace Park.

Small, seasonally sandy beach. Popular swimming and surfing spot; fishing from the rocky shore south of Winamar Rd.

Economic Ranking: E

07-227 La Jolla Hermosa Park.

Small blufftop park with benches and picnic tables.

Economic Ranking: E

07-228 **Bird Rock.**

Rocky point; popular fishing, surfing, and skin diving spot.

Economic Ranking: E

07-229 Sun Gold Point.

Viewpoints overlook a rocky beach with tidepools. Stairway at end of Linda Way leads to rocky cove popular for fishing.

Economic Ranking: E

07-230 Cal-Met Park.

Picnic area situated on bluffs above a cobblestone beach.

Economic Ranking: E

07-231 Tourmaline Surfing Park

Rocky beach popular for surfing, fishing, skin diving, and sea kayaking.

Economic Ranking: E

07-232 Palisades Park.

Paths lead from a grassy picnic area to a wide, sandy beach.

Economic Ranking: E

07-233 Pacific Beach Park.

Landscaped picnic area overlooks the ocean; street ends provide access to a sandy beach used for surfing and swimming. Separate paved paths for pedestrians and bicycles parallel the beach.

Economic Ranking: E

07-234 Crystal Pier.

Located at the end of Garnet Ave., the pier is open from 7am to sunset for walking and fishing.

07-235 Mission Beach Park.

Sandy beach with areas posted for surfing and body surfing. A paved promenade runs along the beach and is popular for walking, jogging, roller skating, and bicycling. Belmont Park, located at the old amusement park site, has shops, restaurants, and family amusements. Shops line the promenade south of W. Mission Bay Dr. Basketball courts and a play field are at the south end of the beach.

Economic Ranking: E

07-236 Bonita Cove.

Used for swimming, picnicking, over-the-line softball, and volleyball. Transient vessel anchorage allowed in cove.

Economic Ranking: E

07-237 Ventura Cove.

Sandy beach, grassy picnic area with fire rings and a paved path. Popular swimming spot for small children. Bahia Point to the north has a grassy picnic area and a small sandy beach.

Economic Ranking: E

07-238 Santa Clara Point and El Carmel Point.

Facilities at Santa Clara Point include the city's boathouse, a one-lane concrete boat launch, a dock, a water-ski landing and take-off area, barbecue grills, a baseball field, tennis courts, multi-purpose courts, and a city-operated recreation center (619) 490-0928. The Mission Bay Yacht Club, a parking area, and a sandy beach are located on El Carmel Point, about .4 mile south of Santa Clara Point. A sandy beach is located between the two points in San Juan Cove and continues south through Santa Barbara Cove. Bayside Walk, a bicycle and pedestrian path, parallels the beach.

Economic Ranking: E

07-239 Sail Bay and Riviera Shores.

The northwest portion of Mission Bay. Grassy park with a children's play area with access to a sandy beach at sail bay. Bayside Walk, a paved bicycle and pedestrian path, follows the bay shore from Sail Bay south to W. Mission Bay Drive. Riviera Shores is a sandy swimming beach with a water-ski take-off and landing area (619) '76-8 '00.

Economic Ranking: E

07-240 Crown Point Shores.

Sandy beach area with picnic area, children's play area, physical fitness course, water-ski landing and take-off areas, and public loading dock (619) 276-8200.

07-241 Vacation Isle and Ski Beach.

Vacation Isle is bisected by Ingraham St.; the west side has a hotel and golf course, boat rentals, a youth camp, and a model boat pond. North Cove Public Beach, on the northwest side, is a small sandy beach with picnic tables and a paved path. South Cove is located by the boat basin on the southwest side. Ski Beach, on the east side of the island, is a noted water-skiing and boating spot, with a water-ski take-off and landing area, a four-lane concrete boat launch, a dock, picnic areas, volleyball courts, and a swimming beach (619) 276-8200.

Economic Ranking: E

07-242 Dana Landing and Quivira Basin.

24-hour, 5 lane concrete boat ramp across from the landing. Sunset Point is a public park and popular fishing spot with picnic facilities and a paved path. Quivira Basin includes a large grassy picnic area with sport fishing and marina services. A bicycle path runs from the basin east along Sea World Dr. and Friars Rd., and connects with another bicycle path that runs along E. Mission Bay Dr.

Economic Ranking: E

07-243 **Sea World.**

A 135-acre aquarium and theme park located on the southern shore of Mission Bay. Attractions include marine life shows and displays, rides, snack bars, and gift shops (619) 226-3951.

Economic Ranking: E

07-244 Fiesta Island.

Undeveloped island used for jet-skiing and fishing, and for viewing special aquatic events such as speedboat races. There are several swimming beaches around the island with fire rings (619) 276-8200.

Economic Ranking: E

07-245 **East Shore.**

Facilities include Mission Bay Visitor Center, landscaped picnic areas, paved paths, playgrounds, physical fitness course, and basketball courts; swimming and fishing at sandy beaches, which include Playa Pacifica and Tecolote Shores (619) 276-8200.

Economic Ranking: E

07-246 **De Anza Cove.**

Sandy beach and swimming area with large picnic areas, volleyball courts, playground, paved path, four-lane concrete boat ramp, and dock. The cove is used by swimmers and water-skiers (619) 276-8200.

07-247 Robb Field and Playground.

A large park and athletic field at the mouth of the San Diego River with picnic areas and facilities for baseball, tennis, and basketball (619) 531-1563.

Economic Ranking: E

07-248 Ocean Beach Park.

Sandy beach with tidepools, a small grassy picnic area, and a paved promenade. The beach is noted for excellent surfing, but swimming and surf fishing are also popular (619) 221-8901.

Economic Ranking: E

07-249 Ocean Beach Municipal Fishing Pier.

2,100 foot-long t-shaped pier, located at the south end of Ocean Beach Park, is the longest pier on the west coast (619) 221-8901.

Economic Ranking: E

07-250 Ocean Beach City Beach.

A series of small pocket beaches and tidepools along the coast from the Ocean Beach Pier south to the end of Pescadero Avenue; sunbathing and surfing.

Economic Ranking: E

07-251 Sunset Cliffs Park.

Several steep trails lead from the parking lot down the cliff face to pocket beaches frequently used by experienced divers and surfers.

Economic Ranking: E

07-252 Shelter Island.

Beach area of the island is popular for swimming, fishing, water-skiing, and picnicking. A pedestrian/bicycle path runs the length of the island. Other facilities include: picnic areas, public moorings, hoists, fishing pier, and a 24-hr. boat launch with ten concrete lanes.

Economic Ranking: E

07-253 La Plava.

Narrow, sandy beach located on the Point Loma Peninsula just west of Shelter Island.

Economic Ranking: E

07-254 Cabrillo National Monument.

Commemorates Cabrillo's discovery of San Diego Bay. The monument features a visitor center with exhibits, interpretive programs, and a gift shop. Hiking trails overlooking the ocean and the bay lead to some of the finest tidepools in Southern California (619) 557-5450.

07-255 Spanish Landing Park.

Sandy beach located just south of the San Diego Intentional Airport. Popular swimming spot with a grassy picnic area near the shore.

Economic Ranking: E

07-256 Harbor Island.

Serves primarily as a boating center. Other facilities include hotels, restaurants, shops, and boating services. A path with benches runs the length of the island.

Economic Ranking: E

07-257 Embarcadero.

Paved pedestrian bicycle path with benches that runs along the waterfront on the east side of the bay. The Embarcadero also features restaurants, fish markets, and shops.

Economic Ranking: E

07-258 Maritime Museum.

Three historic ships moored along the Embarcadero at the end of Ash Street (619) 234-9153.

Economic Ranking: E

07-259 Embarcadero Marina Park.

Divided in two sections, but is connected by walkway along the seawall on the bay. Facilities include picnic areas, paved path, basketball courts, and par course.

Economic Ranking: E

07-260 Bay View Park.

Small, landscaped park with beaches and paved viewpoint.

Economic Ranking: E

07-261 Harbor View Park.

Small, grassy park with benches.

Economic Ranking: E

07-262 Centennial Park.

Bayfront park with lawns, benches, paved paths, and a small sandy beach. Fishing pier at landing for pedestrian/bike ferry to San Diego.

Economic Ranking: E

07-263 Coronado Tidelands Regional Park.

Large park with baseball diamond, play fields, par course, pedestrian and bike paths, lawns, benches, picnic tables, and a small, sandy beach used for swimming.

07-264 Glorietta Bay Park

Playground, grassy picnic area, small sandy beach, and boat launch (619) 522-7342.

Economic Ranking: E

07-265 Coronado Shores Beach.

Wide, sandy beach heavily used for surfing, swimming, and surf fishing.

Economic Ranking: E

07-266 L.M. " Pop " Pepper Park.

Public ramp operated by the Port of San Diego. Facilities include a ten-lane concrete boat ramp, a small dock, trailer space, a picnic area with barbecue grills, and a fishing platform (619) 686-6200.

Economic Ranking: E

07-267 Chula Vista Launching Ramp.

Concrete boat launch with ten lanes. Facilities include docks, a hoist, picnic areas with barbecue grills, and a playground. Noted for swimming, fishing, and water-skiing (619) 686-6200.

Economic Ranking: E

07-268 Cays Park.

Three segments offer tennis courts, volleyball, baseball diamond, and a multi-purpose field.

Economic Ranking: E

07-269 Silver Strand State Beach.

Sandy beach noted for swimming, surfing, clamming, surf fishing, and catching grunion. Also provides picnic areas and firepits (619) 435-5184.

Economic Ranking: E

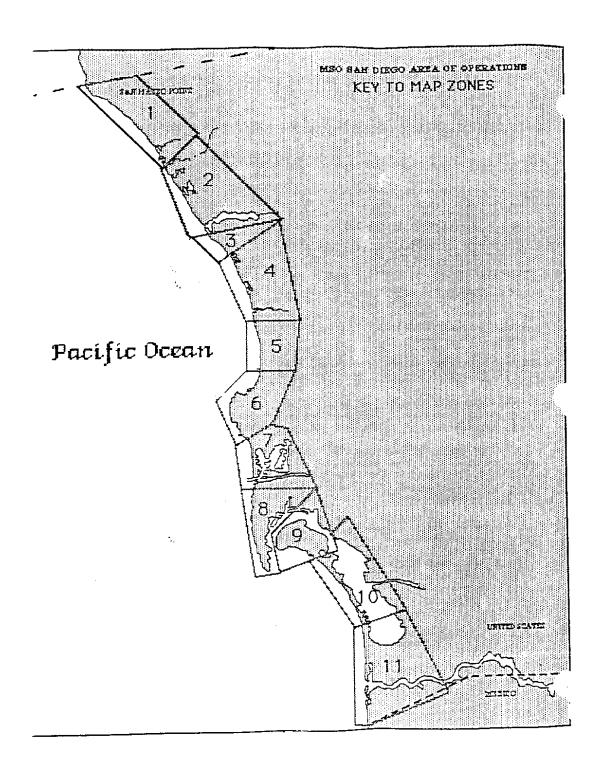
07-270 Imperial Beach.

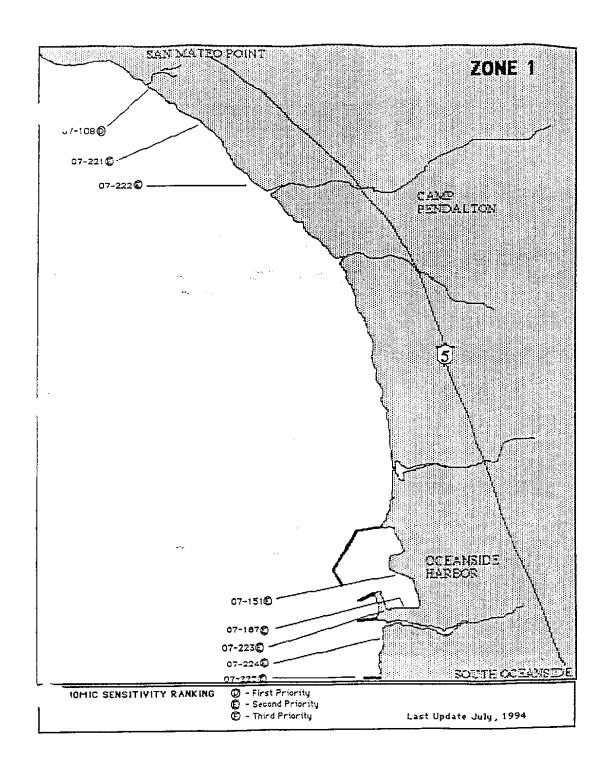
Wide, sandy beach popular for swimming, body surfing, and surf fishing. The Imperial Beach Municipal Pier has a landscaped plaza and a cafe (619) 423-8322.

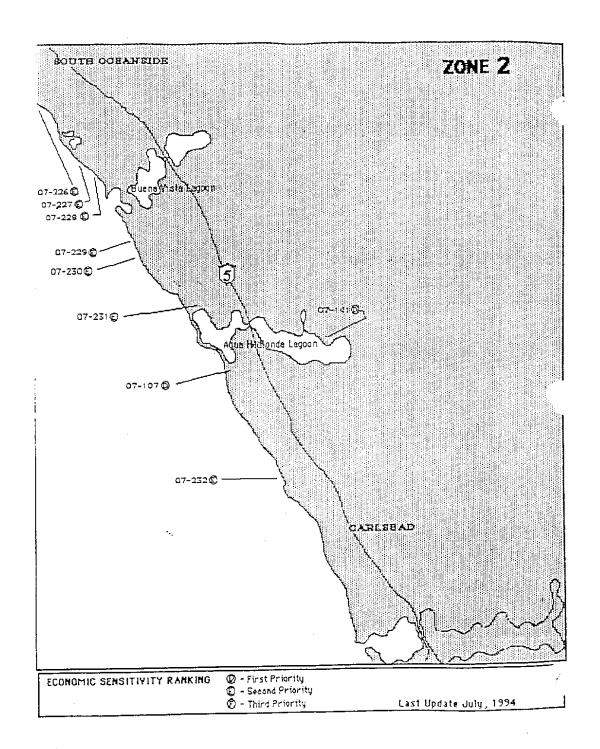
Economic Ranking: E

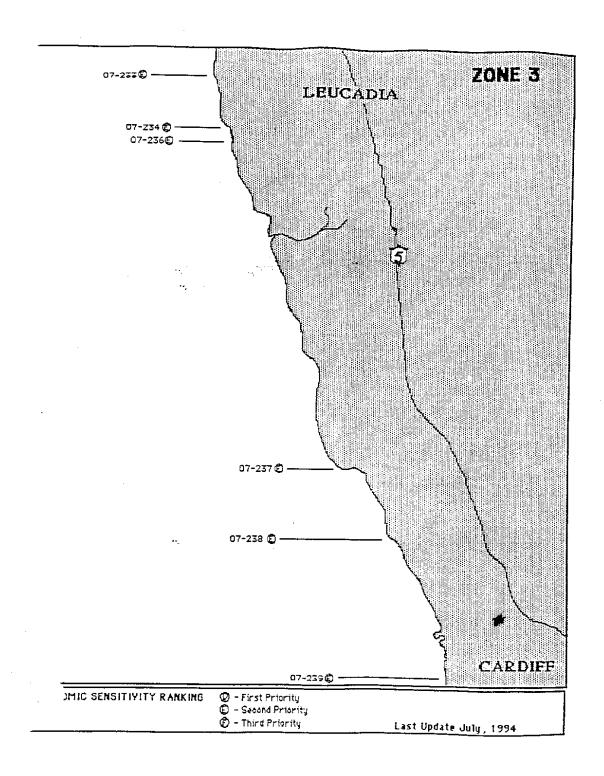
07-271 Border Field State Park.

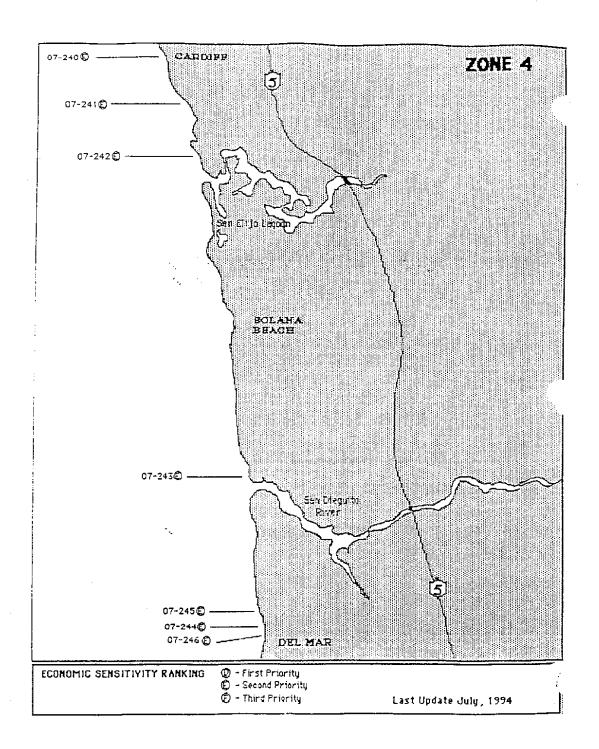
Located on U.S. Border with Mexico, park features 2-mile stretch of sandy beach used for swimming, clamming, and surf fishing. Provides picnic areas, and hiking and equestrian trails (619) 435-5184.

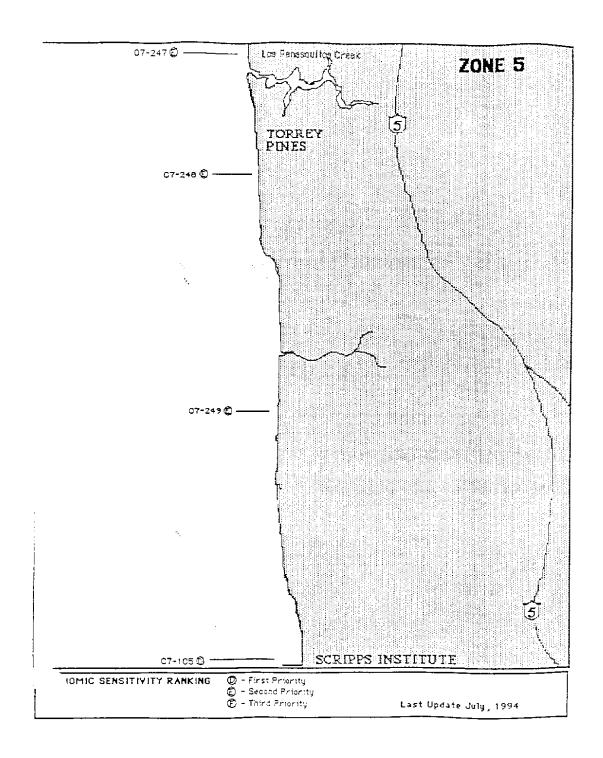


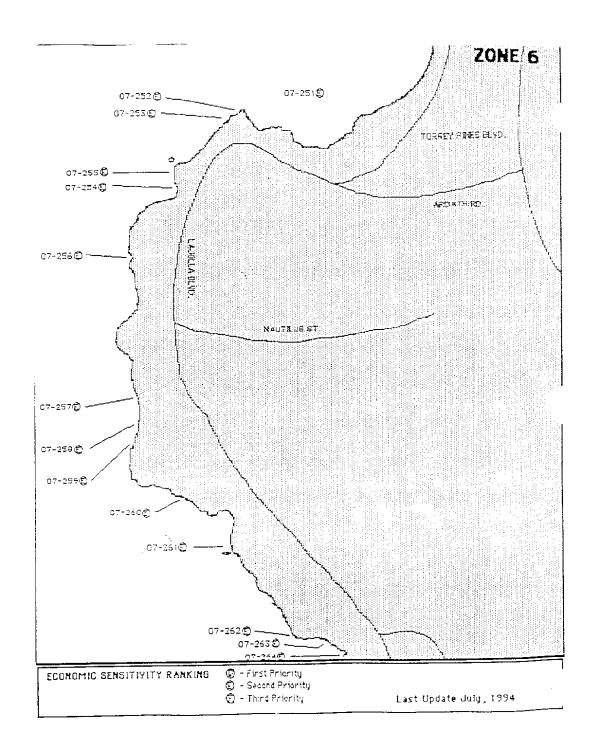


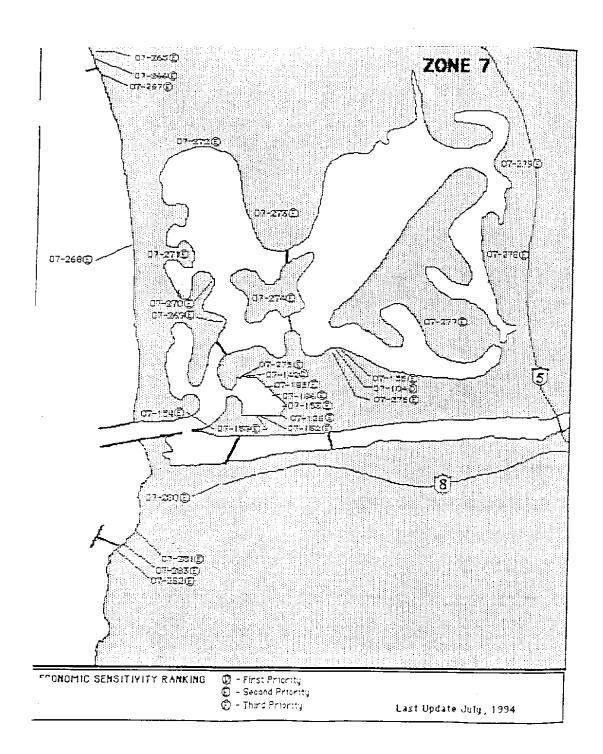


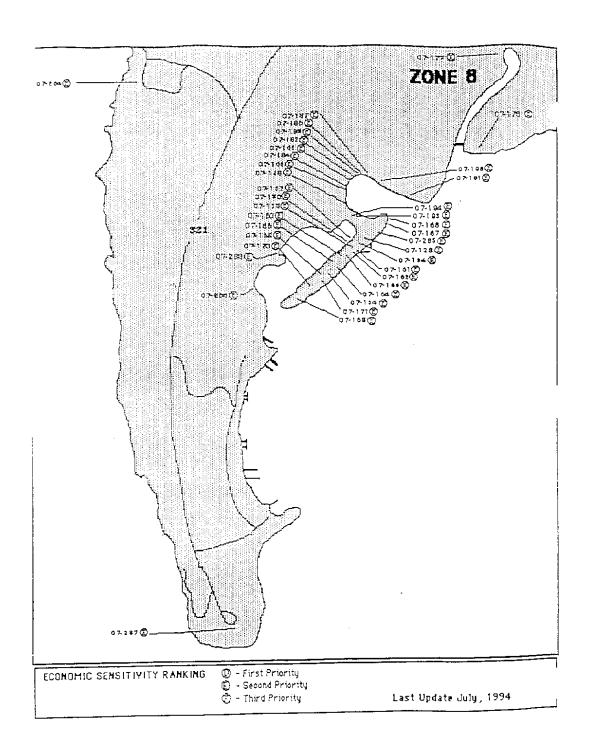


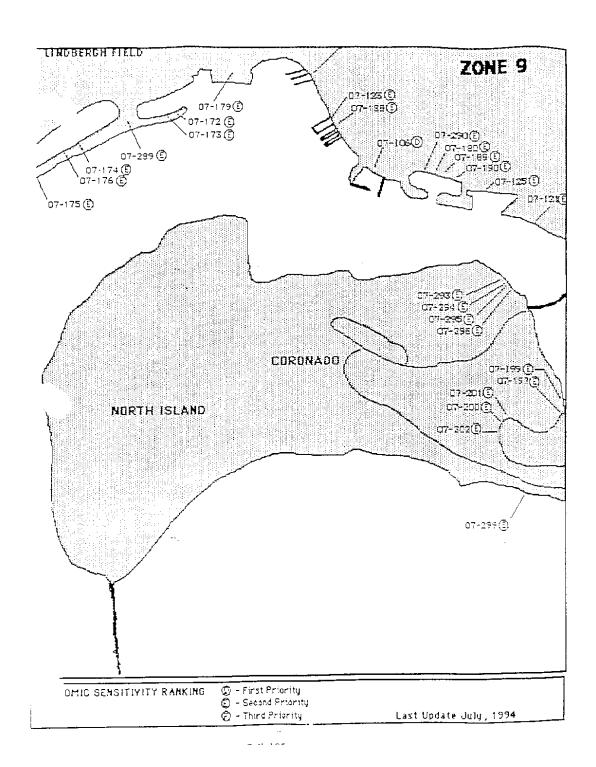


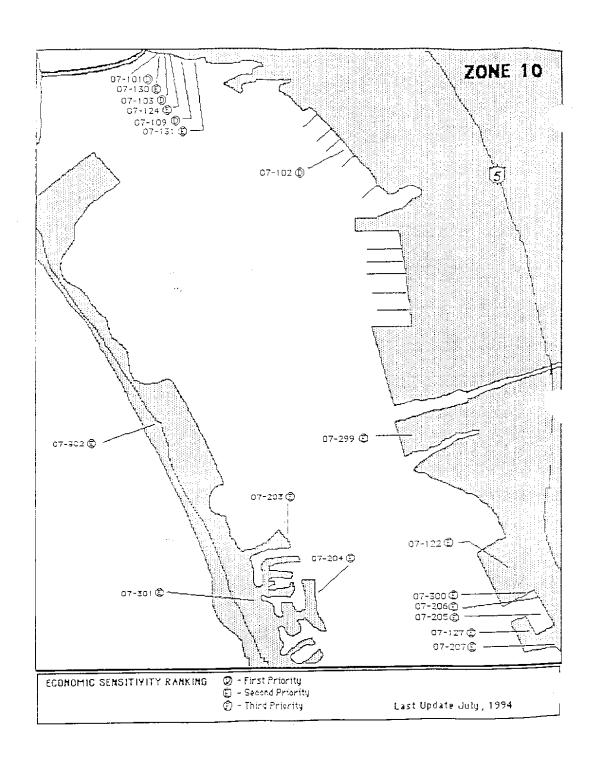


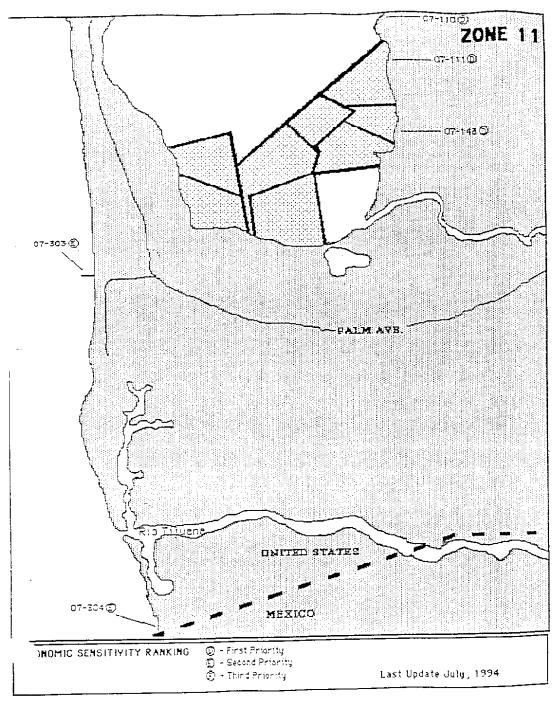












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TAB C - HISTORICAL AND CULTURALLY SENSITIVE AREAS

The primary purpose of Tabs A through C of this Appendix is to identify and incorporate into emergency response planning the specific resources subject to injury or damages from an oil spill event. An important and immediate consideration at the occurrence of an oil spill in California marine waters is whether areas that are culturally sensitive or contain historical or archaeological resources may be impacted by the spill. The affects of oil upon the resources can be extremely damaging. Often of greatest concern to the safety of cultural and historical is the response actions such as establishment of equipment staging areas. Culturally sensitive sites are often difficult to identify visually and therefore pre-spill planning becomes essential to avoid damaging these resources.

Historical resources are defined under the California Environmental Quality Act (CEQA) to include, but not limited to: "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California". These sites or areas would either be on or eligible to be placed on the California Register of Historical Resources or the National Register of Historical Places.

The CEQA defines an important archaeological resource as one that: A) is associated with an event or person of; 1) recognized significance in California or American history, or 2) recognized scientific importance in prehistory; B) can provide information which is both demonstrable public interest and useful in addressing scientifically consequential and reasonable archaeological research questions; C) has a special or particular quality such as oldest, best example, largest, or last surviving example of its kind; D) is at least 100 years old and possesses substantial stratigraphic integrity; E) involves important research questions that historical research has shown can be answered only with archaeological methods.

Culturally Sensitive Areas

This Area Contingency Plan does not attempt to identify the location of sites or areas of importance to Native Americans. Many of the coastal areas of significance to Native Americans are known, or have been identified, but are often confidential information. This planning document provides, as available, the contact names, locations and phone numbers of knowledgeable sources for information on areas of cultural or economic significance to Native Americans within California.

The coastline of California contains many sites with culturally sensitive resources. The locations of some sites are available to the general public, but many other locations are held as confidential information at Regional Information Centers throughout the State and by local Indian organizations. Culturally sensitive areas exist on both public and private lands and therefore the following public agencies and individuals listed below should be contacted during a significant oil spill incident:

Historical and Archaeological Sites

California has many identified historical or archaeological sites of significance near marine waters of the State. The Office of Historic Preservation, within the Department of Parks and Recreation, maintains the California Register of Historical Resources. The California State Lands Commission maintains a database of known shipwrecks and other underwater marine archaeologically significant resources in State waters.

Provided below is a list of references for information about historical and archaeological sites at risk from marine oil spills.

Native American Heritage Commission

915 Capitol Mall, Room 364 Sacramento, CA 95814

Point of Contact: Larry Myers or Gayle McNulty

Phone (916) 653-4082 FAX (916) 657-5390

California Department of Parks and Recreation

Office of Historical Preservation P.O. Box 94296 Sacramento, CA 94296-001 FAX (916) 653-9824

Information Centers Coordinator: William Seidel

Phone (916) 653-9125

CEQA Information: Carol Roland

Phone (916) 653-6624 FAX (916) 653-9824

Resource Protection Division: John Foster, Senior Archaeologist

Phone (916) 653-4529

South Coastal Information Center

San Diego State University San Diego, CA 92182-0436

Point of Contact: Dr. Lynne Christensen

Phone (619) 594-2305 or 594-5527

FAX (619) 594-1358

Local Native American Representatives

Professional Native American Cultural Resource Monitors 46747 Pala Road Temecula, CA 92592

Point of Contact: Phillip Ibanez

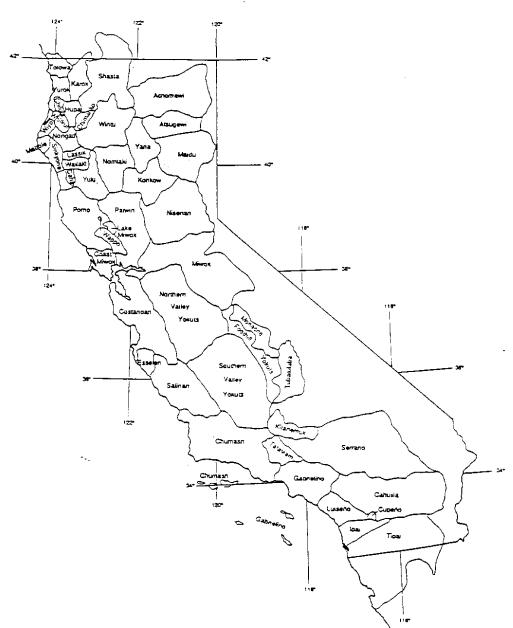
Phone (909) 694-0509 Pager (909) 694-7869

California State Lands Commission

1807 13th St. Sacramento, CA 95814 FAX (916) 327-6674

Environmental Specialist: Kirk Walker

Phone (916) 322-0530



Map of tribal territories in California (from Heizer, 1978).